THE

SOUTHERN REVIEW.

VOL. VII.—No. 13.

A. T. BLEDSOE, LL. D., Editor.

JANUARY, 1870.

BALTIMORE:
HENRY TAYLOR & CO., Sun Building.

Entered according to Act of Congress, in the year 1870, by Albert Taylor Bledsoe, LL. D., in the Clerk's Office of the District Court of the District of Maryland.

☞ FOR BUSINESS NOTICES and TERMS, see 3d Page of Cover. ☜

CONTENTS.

I. What is Moral Science?

II. The Life of Garrick.

III. The Legend and Literature of the Wandering Jew.

IV. Newton's First Law of Motion.

V. Anglo-Saxon Literature.

VI. Hugh Swinton Legare.

VII. The Cotton Interest.

VIII. The Wave Theory of Physics.

IX. Scientific Ballooning.

Daphles; A Poem.

X. Notices of Books.

Bledsoe's Collegiate Institute

FOR

YOUNG LADIES,

360 & 362 N. EUTAW STREET,

Baltimore, Md.

Prof. ALBERT T. BLEDSOE, A. M., LL. D., Principal,

Formerly Professor of Mathematics and Astronomy in the University of Mississippi; late Professor of Mathematics in the University of Virginia; and now Editor of *The Southern Review;* Author of *A Theodicy, or Vindication of the Divine Glory, &c.; Is Davis a Traitor, or Was Secession a Constitutional Right, &c.; The Philosophy of Mathematics;* and several other works, besides several thousand pages of Miscellanies—literary, scientific, and philosophical, principally published in Northern Reviews and Magazines, and partly republished in Europe; Logic and Moral Science; Rhetoric and Belles Lettres; English Language & Literature.

MRS. S. BLEDSOE HERRICK, Vice-Principal;
Daughter of Dr. Bledsoe, and Author of several articles in *The Southern Review;*
Algebra, Geometry, and Natural Philosophy.

Rev. EDWARD J. STEARNS, A. M.,
Formerly Professor in St. John's College, Annapolis, Maryland;
Ancient Languages—Latin and Greek.

MISS E. M. BLEDSOE,
English Grammar and Composition, French and Latin.

MISS ANNE CROWLEY,
Arithmetic, Geography, Chronology, and Mythology.

———— ————, *
The French as a Spoken Language.

MADAME LEGORJU, †
The German Language.

MRS. JULIET WORKMAN,
Music—Instrumental and Vocal.

A PREPARATORY DEPARTMENT is organized in connection with the Institute, in which are taught, under the supervision of MRS. BLEDSOE and MISS CROWLEY, Spelling, Reading,

* This vacancy will be filled by a Teacher of the purest Parisian French.

† This accomplished Teacher will give private lessons in French, as well as in German, which is her native language.

Writing, Arithmetic, and Geography. *Particular attention is given to this all-important Department of the School.*

The Institute is divided into Two Classes, according to the age and advancement of the pupils.

It opens on the 15th of September, and closes on the 20th of June. A recess of ten days is given at Christmas, and also at Easter.

Punctual attendance at the beginning of the Session is highly important. Pupils may, however, enter at any time, but will be required to remain till the end of the Scholastic Year or else to make full payment as if they had remained.

Payments to be made in advance. Bills rendered semi-annually, at the commencement of the session, or on entrance, and on the 1st of February.

Nos. 360 and 362 Eutaw street, are two adjacent four-story brick buildings, admirably adapted to the purposes of a school, and provided with all the modern improvements, such as gas, baths, &c., with light and cheerful school-rooms, and separated from Eutaw Square by one house only; a situation well known as one of the most elevated, airy, healthy, and delightful parts of Baltimore.

Each boarding pupil is required to be supplied with towels, table-napkins, napkin-ring; all of which, as well as the clothing, should be marked with the owner's name.

SEMI-ANNUAL TERMS FOR DAY PUPILS.

Preparatory Department	$30 00
Junior Class	40 00
Senior Class	50 00
The French Language—Written and Spoken	20 00
The Latin Language	20 00

Music on Piano, $20.00 per Quarter.

SEMI-ANNUAL TERMS FOR BOARDING PUPILS.

Tuition, Board, Washing, Fuel, and Lights $250 00

No extra charge will be made to Boarding Pupils for either French or Latin.

An extra class in Algebra and Geometry, for the benefit of Young Ladies not of the Institute, will be formed and instructed by PROFESSOR BLEDSOE and MRS. HERRICK; and an extra class in Latin will, for the same purpose, be formed and instructed by PROFESSOR STEARNS. The charge for each class is $30.00. per session.

DISTRIBUTION OF PRIZES.—The first Gold Medal will be given to the Graduate highest in General Merit; the second, to the Graduate highest in French and Latin; and the third, to the Graduate highest in Algebra and Geometry. Lesser prizes will, also, be given to the best or most successful students in Spelling, in Reading, in Arithmetic, in English Grammar, in Geography, etc., etc.

To Graduates well qualified to teach, certificates of proficiency and qualifications will, if desired, be signed and given by the Professors and Teachers of the Institute.

The Vice-Principal will, at the request of Parents or Guardians, purchase Wearing Apparel to the best advantage for Boarding Pupils, and without any charge for her services; provided the money be furnished for the purpose.

PROFESSOR BLEDSOE, as Principal of the Institute, will superintend all its operations, and introduce, as far as possible, the methods of instruction which the experience of the best schools, both in this and in other countries, has shown to be most wisely adapted to the great purposes of Education. *He will, also, at the end of each week, examine the Classes on all they have studied during the week.*

In addition to the regular course of instruction, a Lecture will be delivered, free of charge, every fortnight, by PROFESSOR BLEDSOE, or by PROFESSOR STEARNS, to the Pupils and Friends of the Institute, on subjects intimately connected with the education and training of the minds and the manners of Young Ladies.

☞Parents and guardians may see, from the above statement, exactly what they will have to pay, as there are none of those 'extras' which, in some schools, amount to more than the regular charges.

JOHN MERRYMAN. B. H. WARING.

JOHN MERRYMAN & CO.

FARMERS' AND PLANTERS' AGENCY

AND REAL ESTATE BROKERS,

69 W. FAYETTE ST., BALTIMORE, MD.

PERUVIAN GUANO, LAND PLASTER, AND ALL MANUFACTURED FERTILIZERS OF KNOWN VALUE, AGRICULTURAL IMPLEMENTS, MACHINERY, LIVE STOCK, &c.

HENRY GASSAWAY,

ARTIST,

58 SARATOGA STREET,

BALTIMORE.

Photographs, Porcelain and Landscape Pictures Painted

IN THE BEST STYLE,

AT MODERATE PRICES.

THOMAS & JOHN M. SMITH,

MANUFACTURERS OF

Raw and Double-Boiled Linseed Oils,

Nos. 121 and 123 SMITH'S WHARF,

BALTIMORE, MD.

IS DAVIS A TRAITOR?

OR

WAS SECESSION A CONSTITUTIONAL RIGHT?

BY ALBERT TAYLOR BLEDSOE, LL. D.

PP. 264. PRICE $1.50 PER COPY.

The Leading Democratic Journal of Pennsylvania.

'69 "THE AGE." '69

Great Improvements and Great Inducements.

THE UNION AND THE CONSTITUTION.

CIRCULATE THE DOCUMENTS!

A first-class Newspaper, containing the very latest intelligence from all parts of the world, and the only Democratic Morning Journal published in Philadelphia. Advertisers will find it a desirable medium for giving publicity to their cards, as THE AGE has a larger mail list and reaches a class who subscribe for no other paper.

Published every morning (except Sundays,) at 14 & 16 South Seventh St., Philadelphia

TERMS:

DAILY AGE.

$9.00 PER ANNUM. $4.50 FOR SIX MONTHS. $2.50 FOR THREE MONTHS.

THE WEEKLY AGE.

A complete Compendium of the News of the week. Adapted to the wants of the Politician, the Farmer, the Merchant, the Mechanic, the Family Circle, and the General Reader.

Read Our Terms.

ONE COPY, ONE YEAR	$ 2 00
FIVE COPIES	9 00
TEN COPIES	17 50
TWENTY COPIES	33 00

The following deductions from the above rates will be made when ALL THE PAPERS ordered are sent to a SINGLE ADDRESS, and not addressed severally to the members of the club:

FIVE COPIES, ONE YEAR	$ 8 50
TEN COPIES	16 50
TWENTY COPIES	30 00
ONE HUNDRED COPIES	100 00

One copy will be furnished gratis for getting up a club of ten, or more, to one address, for one year.

Address all orders to

WELSH & ROBB, Proprietors,

14 & 16 *SOUTH SEVENTH STREET, PHILADELPHIA, PA*

NOAH WALKER & CO.

Manufacturers, Jobbers and Retailers of

Clothing and Furnishing Goods,

Nos. 165 & 167 WEST BALTIMORE STREET,

(WASHINGTON BUILDING,)

BALTIMORE, MD.

By our extensive facilities and experience of many years' service before the Public, we are able to keep our stock always COMPLETE, and adapted to every taste, in style and fabric; and manufacturing exclusively ourselves, can warrant satisfaction, and offer goods with but one profit We ask especial attention to our

ORDER DEPARTMENT.

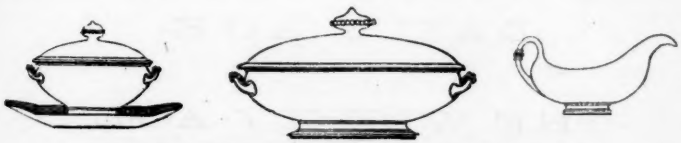
Gentlemen's CLOTHING and SHIRTS, of any material and style MADE TO ORDER, with prompt and careful attention, and strict reference to the established reputation of the House for

TASTEFUL AND SUBSTANTIAL CLOTHING.

☞Prices guaranteed to be lower than Merchant Tailoring Establishments generally.

Samples of material with *directions by which any one can measure*, and prices sent by mail when desired.

NOAH WALKER & CO.



STAPLE FRENCH AND ENGLISH CHINA,

IMPORTED DIRECT BY

SAMUEL CHILD & CO.

WHOLESALE AND RETAIL DEALERS IN

Cutlery, Plated Goods, and House Furnishing Goods Generally,

No. 20 N. Charles St., Baltimore, Md.

Baltimore College of Dental Surgery.

TWENTY-NINTH ANNUAL SESSION. 1868-69.

The Twenty-ninth Annual Session will commence on the 15th of October, 1868, and close March, 1869. Infirmary will open on the 15th of October, 1868. Twenty one Lectures are delivered every Week throughout the session, besides the hours spent in actual practice.

Lecture and Demonstration Fees, $115—Matriculation Fee (paid only once), $5—Diploma Fee, $50.

For information, address F. J. S. GORGAS, M. D., DEAN OF THE FACULTY,

No. 42 Hanover Street, Baltimore, Md

The American Law Times

AND

OFFICIAL JOURNAL of the COURTS & DEPARTMENTS,

Issued on the last Thursday of every month, at the National Capital.

Each number will contain sixteen pages (quarto) of the size of the 'London Law Times,' and forty-eight pages, in three sections, (octavo,) of the size of 'Brightly's Digest,' making a complete single number to contain

SIXTY-FOUR PAGES OF MATTER.

THE LAW TIMES.

THE FIRST (*or Quarto*) SECTION will contain full and reliable general American and Foreign law and official information; a register of appointments made, and acts and resolutions approved by the President; rules and orders of the U. S. Courts; transactions of interest in all the various Departments, Bureaus, and Offices of Government; general legal and official statistics; abstracts of Foreign Laws; and reports of leading decisions in Bankruptcy rendered in the Courts of the United States, &c., &c., &c.

THE LAW TIMES (U. S.) COURTS REPORTS.

ONE SECTION of 16 Pages, (*Royal Octavo,*) will contain official Current Reports of Leading Decisions in all the United States Courts.

THE LAW TIMES DEPARTMENTS REPORTS.

A SECOND SECTION OF 16 Pages, (*Royal Octavo,*) will contain all the Leading Current Decisions, Rulings, Orders, Opinions, and Reports of Cases in the Executive Departments, Bureaus, Offices and Agencies of the U. S. Government.

THE LAW TIMES DIGEST.

THE REMAINING SECTION, also of 16 Pages (*Royal Octavo,*) will be devoted to a compilation of Syllabuses of recent Leading Causes in Law and Equity, decided in the courts of final appeal of the several States.

These various sections will be distinctively paged so that at the termination of the year there will be presented four complete volumes, to each of which will be attached a carefully prepared index.

The work has received the unqualified endorsement of the most eminent jurists and officials of the nation.

TERMS, including all the reports, six dollars per annum. Vol. I. complete, bound, seven dollars and fifty cents.

Address

THE AMERICAN LAW TIMES,

Lock Box No. 29,

Oct. 1, 1869 WASHINGTON, D. C.

NEW YORK HOTEL,

721 BROADWAY

NEW YORK.

D. M. HILDRETH & CO.

PROPRIETORS.

This popular Hotel, so long and favorably known to the Southern travelling public, is still in the hands of the above-named proprietors, who spare no pains to maintain its well earned reputation.

Oct. 1, 1869.

THE SOUTHERN CHURCHMAN

Was established January 1, 1834. It was then announced that the principles to guide its Editor were simply "The Word of God as interpreted by the Articles, Liturgy and Homilies" of the Protestant Episcopal Church. It will continue to maintain the same principles, and endeavor to be a welcome visitor to the parsonages of the Clergy and the homes of the Laity. Eschewing all matters that relate to the politics of the day, it will endeavor to furnish promptly all important foreign and domestic ECCLESIASTICAL intelligence; by its selections to interest and improve both the mind and heart; and in all ways to contend earnestly for the truth as held by the Protestant Episcopal Church, with hatred for none and kindness to all.

TERMS:

Four Dollars a Year in Advance. Two Dollars for Six Months.

Clergymen and Candidates for Orders will be furnished with the paper.

CHURCHMAN OFFICE,
Alexandria, Va.

GEORGE S. CLOGG,

No. 2 S. CALVERT ST., One Door South of Baltimore,

Manufacturer of All Kinds of

Gentlemen's & Boys' Boots & Shoes.

Also, a Large Assortment of Ladies' and Children's Shoes of the Best Make.

Also, at No. 159 WEST PRATT STREET, opposite Maltby House, where may be found all kinds of Gentlemen's Wear in the BOOT and SHOE line. This Establishment is managed by A. M. DAVIS, formerly of Page & Co., Richmond, Va.

NEW SCIENTIFIC EDUCATIONAL WORK.

THE SCIENTIFIC BASIS OF EDUCATION,

BY JOHN HECKER.

A. S. BARNES & CO., 111 & 113 WILLIAM ST., N. Y.

Commended by the late Bishop Hopkins, of Vermont; Bishop Potter, of N. Y. Presidents and Professors: Lewis, N. Y.; Stearns, Hickok, Boyden, Seelye, Hitchcock, Mass.; Atwater, Cattell, Johnson, Pa. Superintendents of Public Schools: Randall, Kiddle, Harrison, N. Y. City; Abbott, Kingston, Shelden, N. Y. State; Ballard, Maine; Parrish, Conn.; Philbrick, Mass.; Sears, N. J.; Van Bokelen, Farquhar, Md.; White, W. Va.; Hoss, Ind.; Norris, Ohio.; Stevenson, Ky.

The work is designed especially for the education of the teacher and for his use in his profession. It is adapted to all the professions in its view of the activities of the human mind in its three departments of Mentality, the Spiritual, the Intellectual and the Animal.

The Temperaments are classified and illustrated, phenomenally, by four beautifully executed Chromo-lithographic plates. Their operations are physiologically and anatomically discussed in connection with the mental life, phrenologically defined and explained, with the special offices of the Holy Ghost in His influence upon the soul of man. The mind is traced, scientifically, in its subjective dependence.

G. M. FERREY, M. D.

VAPOR BATHS & MEDICINAL ELECTRICITY.

No. 60 N. HIGH ST., BALTIMORE.

Open from 8 A. M. to 7 P. M. Sundays, from 8 A. M. to 2 P. M.

From the Rev. Hugh Roy Scott, St. Matthew's Church, Baltimore.

About two years since, as I was returning from Europe, I received a violent fall from a sudden lurch of the steamer, which severely bruised the sciatic nerve of my right leg, and completely paralyzed the upper part of the leg.

In a month I was sufficiently recovered to walk a little with the aid of a crutch, and in three months was able to get about with the assistance of two canes. But for several months after this time there was scarcely any improvement, though I perseveringly tried the remedies prescribed by a number of the best physicians in Baltimore and Philadelphia.

Six months after the injury, I was induced to try Dr. Ferrey's Baths, combined with electricity, and with the happiest results. In a few weeks I was able to throw away one cane, and walk with scarcely any discomfort. When I commenced taking the baths I was suffering with pain and great weakness in my spine and right shoulder, which had continued, with little cessation, from the day of the injury. I had only taken about a dozen baths, when I was entirely relieved of both. At the same time my general health was greatly improved.

During the past few months I have been suffering from an attack of rheumatism, for which I tried the baths at the Hot and Warm Springs in Bath County, Va., with no perceptible benefit. But since my return to Baltimore, a month ago, I have been almost entirely relieved by Dr. F.'s Baths.

From what I have seen of the effects of these baths in numerous cases, I am satisfied that in almost every case of rheumatism, great relief, if not permanent and complete cure, may be expected.

Baltimore, September 13, 1867.

Baltimore Christian Advocate

A Weekly Religious and Literary Journal,

EDITED BY

Rev. T. E. BOND, M. D., and Rev. R. A. HOLLAND,

AND CONSISTING OF

Sixteen Pages of Fine Paper, Printed in the Best Manner, Cut and Stitched, the Advertisements Being on the Outside and Separable.

Though devoted to the Methodist Episcopal Church, South, the *Advocate* will commend itself to all who love the Lord Jesus in sincerity. The editors understand that Christianity is broader than any one of its parts, and Truth more catholic than any of the symbols in which it is expressed. With this understanding, they propose to give to the religious public a paper which will prove acceptable to all evangelical denominations.

Terms.—For Single Subscribers, $4.00; Clubs of Seven, $3.00.

Address, Rev. T. E. BOND, M. D.,
or, Rev. R. A. HOLLAND,

Office 8½ St. Paul Street, Baltimore.

☞ Sample Copies now ready for free distribution on application at this office.

"AROUND THE WORLD."

THE NEW YORK OBSERVER

Is now publishing a series of Letters from the Rev. Dr. E. D. G. PRIME, who is making the tour of the World, by way of California, Japan, China, India, Egypt, &c.; together with various other correspondence, all the News, Religious and Secular, and a great variety of the best Reading, Original and Selected.

Now is the time to secure the oldest and

BEST FAMILY NEWSPAPER.

We make the following liberal offers for

NEW SUBSCRIBERS.

We will send the New York *Observer* for one year to

One	*New Subscriber*	*and one Old, for*		$5.50
Two	"	*Subscribers*		5.00
Two	"	"	*and one Old*	7.50
Three	"	"		7.00
Three	"	"	*and one Old*	9.50
Four	"	"		9.00
Four	"	"	*and one Old*	11.50
Five	"	"		11.00
Six	"	"		12.00

And to any larger number at the same rate. Sample Copies Free. Terms, $3.50 *per Annum, in Advance. Send by Check, Draft, Post Office Order or Registered Letter.*

SIDNEY E. MORSE, Jr. & CO., 37 Park Row, N. Y.

American Standard School Books.

SCHOOL BOOKS

PUBLISHED BY

JOHN P. MORTON & CO., LOUISVILLE, KY.

BUTLER'S GOODRICH READERS.

NEW FIRST READER.
NEW SECOND "
NEW THIRD "
NEW FOURTH READER.
NEW FIFTH "
NEW SIXTH "

These Readers, by Noble Butler, A. M., are beautifully printed from electrotype plates, on heavy paper, strongly bound, and are in every way equal to any series of Readers in the market.

READING AND SPELLING.

COMMON SCHOOL PRIMER. 96 pages, 16mo. Cloth backs.
FIRST BOOK IN SPELLING AND READING. By Noble Butler. 72 pages, large 16mo. Elegantly illustrated.
WEBSTER'S SPELLER AND DEFINER. A Sequel to Elementary Speller.

GRAMMATICAL SERIES.

BUTLER'S INTRODUCTORY GRAMMAR.
BUTLER'S PRACTICAL GRAMMAR.

ELOCUTION AND RHETORIC.

BUTLER'S COMMON SCHOOL SPEAKER.
ORIGINAL DRAMAS, DIALOGUES, etc. By Mrs. Russell Kavanaugh.
BRONSON'S ELOCUTION OR VOCAL PHILOSOPHY.
MANUAL OF THE ART OF PROSE COMPOSITION. By Rev. John M Bonnell, D. D.

MATHEMATICAL SERIES. By P. A. Towne.

TONER'S PRIMARY ARITHMETIC.
TOWNE'S INTERMEDIATE ARITHMETIC.
TOWNE'S PRACTICAL ARITHMETIC.
TOWNE'S MENTAL ARITHMETIC. [In press.]
TOWNE'S ALGEBRA. Key to the Algebra.
TOWNE'S GEOMETRY. [In preparation.]
TOWNE'S TRIGONOMETRY AND SURVEYING. [In preparation.]

☞ The Publishers confidently commend the above-mentioned books to the attention of Teachers, School Commissioners, and Parents. They are used by the best teachers in Kentucky, Virginia, Alabama, Mississippi, Missouri, Louisiana, Texas, Tennessee, Georgia; in Utah Territory, and in many private and Public Schools throughout the North and West. We feel justified in predicting that they will become the STANDARD SCHOOL BOOKS of the South and West.

Copies of any of our publications will be sent to teachers for examination with reference to introduction and use, on application to

JNO. P. MORTON & CO., Publishers,
156 & 158 West Main Street, Louisville, Ky.

THREE GRAND HISTORICAL NOVELS.

I.

AURELIA;

OR

THE JEWS OF CAPENA GATE.

Translated from the French by Col. P. F. De Gournay,
LATE OF NEW ORLEANS.

Few books combine like this one, the value of an historical work of great research, abounding in previous and well authenticated data, concerning one of the most important periods of history, with the absorbing interest of a narrative replete with incidents of the most dramatic character.

1 Vol., 12mo., with Frontispiece, ... $1 50

II.

Eudoxia, Empress of the East:

A TALE OF THE FIFTH CENTURY.

TRANSLATED FROM THE GERMAN OF IDA, Countess Hahn-Hahn.

1 Vol., 12mo. Cloth, $1 50.

In this volume there is a curious interest, which will be felt by every one who takes it up for perusal. The feeling is that in the human stream which has dashed through the centuries from East to West, something was left behind, and that it has just been found. This waif seems to come over the wide waste of years from a far clime and a far time, like a storm-beaten bird, glad at having caught up with the fast-flying years, and being wafted along by the gentle breezes of the present. The story is linked to the early history of Christianity, and the scene is laid among the Turks and Greeks of the Orient. It possesses unusual romantic interest, besides being a reflex of the manners and customs of those far countries in the early centuries of the Christian era.—*Missouri Republican.*

III.

ANTOINE DE BONNEVAL:

A Tale of Paris during the Reign of Louis XIV.

By Rev. WM. H. ANDERDON.

1 Vol., 12mo. Cloth, with Frontispiece, ... $1 50

That period of history to which this story relates is one of the most interesting and remarkable epochs in the growth of Christian civilization. The history of the Fronde is as full of instruction and entertainment as that of any other in the annals of France, or of any other country. It was then that the reign of Louis XIV. reached the zenith of its splendor. With trade had come wealth which brought luxury, supplemented with libertinism. Louis Quatorze, Richelieu, Mazarin, De Retz, Conde, are names familiar to students of history. The reading of this tale will give much valuable knowledge of the customs of society, during the period from which its incidents are chiefly drawn.—*Boston Courier.*

"Antoine de Bonneval" presents us with a curious narrative of events occurring in and near Paris in the days of the Fronde, depicted under the alluring form of romance; the author—thoroughly versed in the history of that period, and using his story simply as a vehicle for illustrating the manners and morals prevailing at that day—furnishes us with a series of portraits of the great men who swayed the destinies of France during the earlier portions of Louis XIV.'s reign.—*Round Table.*

The above books are for sale by all booksellers, or will be sent postage free, on receipt of the price. Address all orders to

KELLY, PIET & CO., Publishers,
BALTIMORE.

THE

SOUTHERN REVIEW,

VOL. VII.—No. 13.

A. T. BLEDSOE, LL. D., EDITOR.

Πάντα δοκιμάζετε, τὸ καλὸν κατέχετε.

JANUARY, 1870.

BALTIMORE:

HENRY TAYLOR & CO., SUN BUILDING.

1870.

AP2
S724
v.7

Entered according to Act of Congress, in the year 1870, by
ALBERT TAYLOR BLEDSOE, LL. D
In the Clerk's Office of the District Court of the District of Maryland.

JOHN COX, Printer and Stationer,
BALTIMORE, MD

CONTENTS OF No. XIII.

Art.		Page.
I.	What is Moral Science?	1
	The Elements of Moral Science. By Francis Wayland, D. D., LL. D.	
II.	The Life of Garrick.	30
	The Life of David Garrick. By Percy Fitzgerald, M. A., F. S. A.	
III.	The Legend and Literature of the Wandering Jew.	46
	1. Curious Myths of the Middle Ages. By S. Baring-Gould, M. A.	
	2. The Legend of the Wandering Jew. By Gustave Doré.	
IV.	Newton's First Law of Motion.	72
	1. Newton's Principia.	
	2. Dissertation on the History of the Mathematical and Physical Sciences. By Professor John Playfair.	
V.	Anglo-Saxon Literature.	106
	1. An Historical Sketch of the Progress and Present State of Anglo-Saxon Literature in England. By John Petheram.	
	2. Bibliothek der Angelsächsischen Poesie in kritisch bearbeiteten Texten und mit Vollständigem Glossar, herausgegeben. Von C. W. M. Grein.	

78893

VI. Hugh Swinton Legare. 123

Writings of Hugh Swinton Legaré, late Attorney General of the United States. Consisting of a Diary of Brussels, and Journal of the Rhine; Extracts from his Private and Diplomatic Correspondence, Orations and Speeches, and Contributions to the New York and Southern Reviews. Edited by his Sister.

VII. The Cotton Interest. 159

1. Cotton Culture and the South. By F. W. Loring and C. F. Atkinson.

2. The Cotton Trade. By Ellison.

3. The London Economist.

VIII. The Wave Theory of Physics. 176

Smithsonian Report for 1868.

IX. Scientific Ballooning. 191

La Science en Ballon. Par W. de Tonvielle.

Daphles: a Poem. 213

X. Notices of Books. 227

THE SOUTHERN REVIEW.

No. XIII.

JANUARY, 1870.

ART. I.—*The Elements of Moral Science.* By Francis Wayland, D. D., LL. D., late President of Brown University, and Professor of Moral Philosophy. Boston: Gould & Lincoln. 1867.

This work has, we are assured, long since reached the seventy-seventh edition; and, for aught we know, it has, by this time, passed its one hundredth edition. We learn from the title-page, not the number, but only the character, of the present edition. We only learn that it is a 'Revised and Improved Edition.' Long indeed has it been used in our schools and colleges, in all sections of the country, to the almost entire exclusion of other books on moral science, with the exception of the last ten or fifteen years in the South. Now, this wonderful popularity proves one of two things:—the great merit of the work itself, or the low condition of moral science in this country. Let us see, then, which of the terms of this alternative is the true one.

'When I commenced the undertaking,' says our author, 'I attempted to read extensively, but soon found it so difficult to arrive at any definite results in this manner, that the necessities of my situation obliged me to rely upon my own reflection.' (Preface, p. iv.) Now, by this very candid confession, it is rendered perfectly obvious, that Dr. Wayland could not learn

the elements of moral science from books. He 'attempted to read extensively, but soon found it so difficult to arrive at *any definite results*' in this way, that he resolved to lay aside his books and 'rely upon his own reflection.' He was, then, most truly a self-taught teacher of Moral Philosophy. If, however, he could not learn from the past, may we not doubt whether he is the best possible teacher for the present or the future? If he could not derive 'any definite results,' or clear and correct views, from the reading of Aristotle, or Aquinas, or Butler, or any of the great masters of the science in times past, how could he imagine that others would be more fortunate in the perusal of his pages? Was he, among all the teachers of mankind, the first to introduce clear and definite results into the elements of moral science? Or, in other words, was there no moral science (properly so-called) in existence, till Dr. Wayland made his appearance, and condescended to teach its elements both to himself and to the rest of mankind? And is this the reason why, in his controversy with Dr. Fuller, he signed himself in stately capitals:—'THE AUTHOR OF THE MORAL SCIENCE?'

Our experience has, in one respect, been exactly similar to that of Dr. Wayland. When we began to read on the subject of moral science, we soon found ourselves distracted by cross-lights, and surrounded by no little confusion and difficulty. We did not conclude, however, that all this was the fault of our teachers, who should, consequently, be dismissed, and ourselves alone retained as the only suitable instructors of ourselves. On the contrary, deeply feeling a need of aid and guidance from without as well as from within, we continued to read, and reflect, and compare, and meditate, till the confusion and difficulties occasioned by our first studies gave way, and the science of morals, with all its intrinsic order, self-evidence, and full-orbed beauty, opened on our mind. This was, of course, the work of years. Fortunately, 'the necessities of our situation' did not oblige us to teach, before we had learned, 'the elements of moral science,' or to write a book on the subject. On the contrary, we could read as slowly, as calmly, as patiently, and as persistently, as the great importance of the subject demanded, all the great writers on the science of morals from Aristotle

down to the present day. We not only did read them in this manner, but we also appropriated, by close thought and protracted meditation, all the grand results at which they had arrived. Thus did we conquer, rather than fly from, the confusion and difficulties produced in our mind by a little superficial reading and a few raw reflections. If, by such obscure labors, we are not prepared to write a book on moral philosophy ourselves, we are, at least, fully armed and equipped to do justice to the one written by 'THE AUTHOR OF THE MORAL SCIENCE.'

There is not, in the work of Dr. Wayland, a single 'definite result,' or clear and correct view, which may not be found in the writings of preceding moralists. So far is he, indeed, from having introduced an era of light into the science of morals, that he has not added a single ray to its former effulgence, or cleared up a single one of its obscurities. There are, on the other hand, many indefinite results, many loose, vague, and inaccurate conclusions, in his work, which disgrace the moral science of this age and country, and which even a superficial acquaintance with the writings of his predecessors would have enabled him to correct. So far, indeed, is he from having introduced any 'definite results' of his own into the elements of moral science, that he is, in point of clearness and precision, far behind both Aristotle and Butler; and this, too, in regard to the very first and most fundamental questions of the science. To begin, in proof of this proposition, at the beginning, his book opens with these words:

'Ethics, or Moral Philosophy, is the Science of Moral Law. The first question which presents itself is, What is moral law?' Now, is Dr. Wayland's answer to this question, the first and most fundamental of his whole treatise, a direct, clear, and precise definition of 'moral law?' It is, on the contrary, indirect, circuitous, unintelligible, and obscure, in the extreme. He first defines law in general, and then moral law in particular. 'Let us, then,' says he, 'inquire first, what is *law;* and, secondly, what is *moral* law.'

'By the term *law*,' he continues, 'I think we generally mean a form of expression denoting either a mode of existence or

an order of sequence.' Now, does Dr. Wayland really intend to say, that 'the term *law*' signifies 'a form of expression?' If so, then he confounds law with the words in which it is expressed. 'Thus,' says he, 'the first of Sir Isaac Newton's laws, namely, that every body will continue in a state of rest, or uniform motion in a right line, unless compelled by some force to change its state, denotes *a mode of existence.*' Thus, according to Dr. Wayland, the first law laid down by Sir Isaac Newton, is 'a form of expression,' which '*denotes* a mode of existence.' Now, is not this law itself 'a mode of existence,' and not merely a parcel of words denoting such 'a mode?' Is it not really a law of nature, and not merely 'a form of expression?' We suppose, indeed, that Dr. Wayland was aiming, however obscurely, to say, that law is 'either a mode of existence, or an order of sequence,' for it is obviously something more than 'a form of expression,' or mere thing of words.

But our great objection to this first step in the Moral Science of Dr. Wayland is, that it is an attempt to define law in general; an attempt which never has been, and never will be, crowned with success. We might as well try, indeed, to trisect an angle, to square the circle, or to duplicate the cube, as to give a correct definition of law in general. It is a search for that which has no existence whatever, namely, for some property common to all kinds of laws, by means of which they may be defined. All laws have, indeed, nothing in common but the name; and the search for a common nature, or property, to serve as the basis of a definition, is even more hopeless than the search after the philosopher's stone, the elixir of life, or a perpetual motion. One hundred and thirty-five definitions of law in general have been given by ingenious men, only to be criticised and pulled to pieces by others as ingenious as themselves; and as if this were not sufficient, the endless folly is still repeated by such writers as Dr. Wayland. If he had only read as well-known a writer as Dugald Stewart, and reflected on one of the most remarkable passages of his works, he might have been delivered from his worse than futile attempt to draw all kinds of laws under one and the same definition. The false conception on which this attempt proceeds, that because laws

have a common name, they must have a common nature or property, has long since been exploded by Mr. Stewart. In the course of his refutation of this 'total misconception,' as he calls it, Mr. Stewart says:

'I shall begin with supposing that the letters A, B, C, D, E, denote a series of objects; that A possesses some quality in common with B; B a quality in common with C; C a quality in common with D; D a quality in common with E; while, at the same time, no quality can be found which belongs in common to any *three* objects in the series. Is it not conceivable, that the affinity between A and B may produce a transferrence of the name of the first to the second; and that, in consequence of the other affinities which connect the remaining objects together, the same name may pass in succession from B to C; from C to D; and from D to E.' Mr. Stewart gives this as only one of the many ways in which a series of objects, without any one property in common, may acquire a common name.

Now this reflection, and the reasoning based upon it by Mr. Stewart, are at once obvious, original, and profound. It is produced in answer to the question of Aristippus, 'How can beauty differ from beauty,' and reveals the secret source of some of the most obstinate errors that have infested the human mind. How many philosophers, for example, from Plato to Cousin, have labored in vain to frame a satisfactory theory or definition of 'the beautiful;' hoping to find some quality in common with all the objects which are called beautiful, merely because they have a common appellation or name! No wonder they have never succeeded; for they have pursued shadows merely, endeavoring to grasp and appropriate that which has no existence whatever in the nature of things.

The same remark is applicable to all the attempts of ingenious men to define the nature of law in general. If we analyse all those things which are called laws, we shall find that they have no element or property in common; the only thing they have in common being the name. Hence, when any one undertakes to define law in general, or to point out the common property by which laws are distinguished from other things, he must necessarily fail. He mistakes a name for a reality, a

shadow for a substance; and, finally, an incoherent dream for science. We may frame a definition of law in words, as others have done; but, however carefully constructed, it can be applied to different kinds of laws only by giving totally different meanings to the same terms. Thus, for example, a law is said to be 'a rule of conduct,' given by a superior to an inferior, and 'which the inferior is bound to obey.' Now, who does not see that the words *conduct* and *obedience* have totally distinct meanings when applied to inanimate objects and when applied to the actions of rational and accountable beings? And who does not see that human beings are *bound* to do their duty, in a very different sense from that in which matter can be said to be under an obligation? The same remark may be extended to all the definitions which have been given of law in general. Indeed, every attempt to draw things, so essentially unlike each other, under one and the same mode of expression, is, not to define them, but only to hide their real nature and differences beneath the ambiguities of language. This, as we shall presently see, is precisely what Dr. Wayland has done in his attempts to define *law* in general, and *moral* law in particular. Instead of explaining the nature of moral law, the one great object of his science, he has involved it in the clouds and darkness of misconceptions and errors, from which a little greater respect for the labors of others might have delivered him, and also his *Elements of Moral Science.*

Mind, as every tyro in philosophy is aware, has no property in common with matter. So, in like manner, moral law has no property in common with material law, or the laws of matter. The enunciation of a material law merely states what *will* take place; that of a moral law declares what *shall* be done. The one relates to passive, inert matter; the other to active, self-conscious, intelligent, and responsible mind. Matter never departs from, or violates, its laws; it is, on the contrary, the invariable uniformity in the course of matter, that constitutes its law. In other words, the observance of the law is identical with the law itself, and not something different from it. Thus, for example, the fact that every particle of matter in the universe attracts every other particle with a certain force, is the

law of gravity. The observance is the law, and the law is the observance. There is, in fact, no such thing as obedience to law in the world of matter, except in a figurative or metaphorical sense of the term. Moral law is, on the contrary, one thing, and obedience to it, quite another. Hence, although every act of every moral agent in the universe should run counter to the moral law, still would that law remain the same, as unchanged and unchangeable as the Great Being by whom it was ordained. The formula of material law is, *it will;* that of moral law is, *thou shalt.* The one is 'a mode of existence, or an order of sequence;' the other is a command of God to his rational and accountable creatures. 'A mode of existence, or an order of sequence,' is both the law and its observance; for the two things are identically one and the same. Or, strictly speaking, *the observance of the law* is merely a metaphorical expression denoting the law itself. Moral law is, on the contrary, a command, which may be obeyed or disobeyed, observed or transgressed. It goes before, and stands above, the act by which it is obeyed or transgressed; and is not one with any act, or mode of action, among men or angels.

According to Dr. Wayland, however, moral law is exactly like material or natural law; each being merely 'an order of sequence.' 'The third law of motion,' says he, 'that, to every action of one body upon another, there is an equal and contrary reaction, denotes *an order of sequence;* that is, it declares the general fact that, if one event occur, the constitution of things under which we exist is such that another event will occur.' This 'general fact' is, indeed, the law, and the law is this 'general fact.' They are identically one and the same. But this is not the case with respect to moral law.

Again, he says, 'the axioms of mathematics are laws of the same kind. Thus, the axiom, "if equals be added to equals, the wholes will be equal," denotes an order of sequence in respect to quantity. Of the same nature are the laws of chemistry. Such, for instance, is the law that, if soda be saturated with muriatic acid, the result will be common salt.'

Thus, Dr. Wayland goes on, and finds the very type and essence of moral law in the region of dead, inert matter, in

mechanical philosophy itself, in pure mathematics, and in chemistry, as well as in the world of moral and accountable beings. It is always and everywhere merely 'an order of sequence.' 'The meaning of law,' says he, 'when referring to civil society, is substantially the same. It expresses an established order of sequence between a specified action and a particular mode of reward or of punishment. Such, in general, is the meaning of *law*.' Law, in general, is 'an order of sequence;' and moral law, in particular, is 'an order of sequence' between a specified action and its mode of reward or of punishment!

We had, indeed, fondly supposed, that the first and great commandment, to love God with all our hearts, and all our minds, and all our strength, had some little connection with the moral law of the world. But, if Dr. Wayland's learned disquisition be true, then were we grossly deceived; for this first and great commandment is certainly not 'an order of sequence.' It is simply the will of God, making known and commanding what is right in the *moral* sense of the term.

'Moral Philosophy,' says Dr. Wayland, 'as well as every other science, proceeds upon the supposition of the existence of a universal Cause, the Creator of all things, who has made everything as it is, and who has subjected all things to the relations which they sustain. And hence, as all relations, whether moral or physical, are the result of his enactment, *an order of sequence once established in morals is just as invariable as an order of sequence in physics.*' Now, if this be true, there is then no such thing as sin, or transgression, in the world. For, if moral law be 'an order of sequence,' and if this 'order of sequence' be 'just as invariable as an order of sequence in physics,' or in mathematics, there is then no such thing as a violation of moral law, or sin, in the world. Or, if sin exist at all, it can do so only as a departure from 'an order of sequence' as invariable as fate itself, or as a gross contradiction in terms! What did the Apostle mean, then, when he said, 'Sin is the transgression of the law?' Did he mean that sin is a transgression of an invariable 'order of sequence,' or did he entertain a different idea of moral law from that set forth

by Dr. Wayland? The truth is, that the 'order of sequence' between sin and its punishment is no part of the sin itself, nor of the law of which that sin is the transgression. The law stands before, and the punishment comes after, the sin. The most that can be said of the inevitable punishment, or the natural sequence, of sin, is, that it is one of the sanctions of the moral law, and not that it is the moral law itself. This is, indeed, the bright and eternal transcript of the Divine Mind, and not merely 'an order of sequence' between the acts of men and their results. Is it not evident, then, that Dr. Wayland lost both himself and the moral law, in his wanderings amid the mists of his metaphysical speculations with respect to law in general?

Having, in the first section of his work, disposed of the first great question, 'What is a moral law?' our author proceeds, in the second section, to consider the inquiry, 'What is a moral action?' Now, surely, this is a very simple question; and it might have been very easily answered by Dr. Wayland, if he had not, at the outset, gone so far astray in regard to 'moral law.' He might have said, for example, that moral action has reference to moral law; that it is right when put forth in obedience to the moral law, and wrong when put forth in opposition to that law. As 'sin is the transgression of the law,' so righteousness, or virtue, is obedience to the law. But Dr. Wayland was precluded from this direct and obvious answer to his very simple question, by his unfortunate definition of moral law; for how could he say that sin is a departure from an 'invariable order of sequence,' and virtue a part and parcel of that immutable order? If, indeed, moral law is an invariable 'order of sequence,' then has moral action no reference whatever to moral law, and is neither an observance nor a violation of that law. But our philosophy, as well as our religion, leads us to agree with St. Paul, that 'sin is a transgression,' and virtue an observance, of moral law.

It may seem to be a hard saying, it is certainly a true one, that Dr. Wayland has utterly failed to tell us, What is a moral action? His work has, perhaps, passed through a hundred editions, and yet not one of the many thousands or tens of

thousands who have gone to his pages for instruction, has been able to learn from them, What is a moral action? This most simple, primary, and fundamental question is, by *the* author of *the* moral science, left in utter and profound obscurity. After much irrelevant talk, he finally comes to the following conclusion: 'If the question, then, be asked, What is a moral action? we may answer, it is the voluntary action of an intelligent agent, who is capable of distinguishing between right and wrong, or of distinguishing what he ought, from what he ought not, to do.' Now, according to Dr. Wayland himself, man is precisely such 'an intelligent agent.' Hence, if his definition be true, then is every 'voluntary action' of man 'a moral action.' If we pick up a straw, or throw a stone, this is a moral action! All our voluntary actions are, indeed, however insignificant and trifling, moral actions! Could any result be more indefinite, or more inaccurate?

Dr. Wayland does not seem to have been at all aware, that by the very first principle of the logical doctrine of definitions, he was bound to give the *differentia*, as well as the *genus*, of morality in action. Every moral action is, it is true, a voluntary action; but every voluntary action is not a moral action. Yet, having said that moral actions are voluntary, he does not even pretend to give any criterion, or test, by which moral actions may be distinguished from non-moral ones. On the contrary, all sorts of voluntary actions, whether moral or non-moral, are crowded together and confounded in his crude definition of moral actions. If he had not taken leave of books, as hopeless guides, he might (not to mention a hundred other authors) have learned better from Aristotle, who, after giving the genus of moral actions as 'voluntary,' proceeds to lay down the *differentia*, by means of which voluntary actions are divided and distinguished into moral and non-moral actions, thereby introducing something like the order of science into the elements of morality, instead of leaving them in the chaotic state of their primeval condition.

We shall now, at least for the present, take leave of Dr. Wayland. We have examined the first two sections of his book, not because they are more replete with blunders than

others, but because they relate to the first questions pertaining to the science of morals, and answer our purpose to illustrate his peculiar style of reasoning and reflection. The same style, indeed, runs through every chapter and every section of the same work; which is replete with egregious blunders, and loose, vague, inaccurate statements. We might easily demonstrate the truth of this assertion; but we are already sick of seeing the elements of moral science so miserably mangled.

If, as a preparatory step to the study of moral science, we were required to show what it is *not*, we might dwell still longer on the work of Dr. Wayland. But as our thesis requires us to show What *is* Moral Science, we shall take leave of Dr. Wayland, and return to our blessed communion with the great thinkers of the past, with the great teachers of mankind, from whose writings he found it so difficult to derive any definite results.

The science of morals, as the most judicious minds have ever thought, is, next to theology, the noblest study that can possibly engage the attention of mankind. Accordingly, some of the best intellects, in all ages, have zealously cultivated this department of knowledge; and some of these, among the ancients as well as among the moderns, have left speculations concerning its principles which will live forever. But yet, it is supposed by no one, that the science has attained that clearness and completeness of outline, or that fulness and perfection in the filling up, which leave nothing to be desired. On the contrary, a reconstruction of the whole science is a want that is very generally felt, and especially among its most accredited teachers. This must be our apology for an attempt, not to reconstruct the science indeed, but to contribute whatever may be in our power toward the completion of such a design.

But he who aims to form a system must, first of all, clearly understand what such a system should contain, as well as what it should exclude. According to the decision of two distinguished moralists, Dugald Stewart and Sir James Mackintosh, a theory of ethics embraces only two great questions: First, whence do we derive our notions of right and wrong, of virtue

and vice? and, secondly, what constitutes the essence or nature of virtue and vice? But this is a definition of ethical science *as it is*, rather than as it *should be;* embracing, like the works which it describes, only some of the elements of a complete system of morals.

It is certain, however, that every scheme of ethics should at least discuss these two fundamental questions; especially should it clearly determine the nature of virtue, and set before us a radiant image of the morally good. But where shall we find this great idea, this great central light of morality, exhibited in such a manner as to preclude doubt, and banish obscurity from the mind of the beholder? From the time of Plato down to the present day, the moral philosopher has labored to determine this idea, or define the common property which 'makes all holy things what they are;'[1] and yet this is still a vexed question. Is it not melancholy, indeed, that such a question should have remained so long undetermined; that the clouds and smoke of controversy should still obscure this, the most important and most beautiful of all ideal forms?

Of all those philosophers who have treated the science of morals, it seems to us that Aristotle among the ancients, and Butler among the moderns, are the two great thinkers who have shed the most light on the nature of virtue, or the idea of the morally good. Yet even in the writings of Butler, this idea has not been found at all, by some of his most candid and enlightened followers. Thus Mackintosh, for example, has said that 'the most palpable defect of Butler's scheme is, that it affords no answer to the question, "What is the distinguishing quality common to all right actions?"'[2] Now if this were so, then the exalted praise which is so freely lavished upon Bishop Butler, by the author of the *Progress of Ethical Philosophy*, could scarcely have been deserved; for a solar system without a sun, would not be more defective, or dark, than a system of morals without an idea, or definition, of morality in action. But while we hold that Sir James has fallen into a very grave error on this subject, we do not suppose that the fault is wholly

[1] Eutyphron, or, Of Holiness.

[2] Progress of Ethical Philosophy, p. 124.

in himself, and no part of it in the great teacher for whom he entertains so profound a veneration. For, no doubt, if the master had given that scientific precision and distinctness to his own idea of the nature of virtue, which its transcendent importance demands, he would not have been so sadly misunderstood by the disciple. If he had freed this great idea from every obscurity, and caused it to shine forth with a keen, clear radiance, no such stricture would have found a place in the *Progress of Ethical Philosophy.* One thing, then, which a theory of ethics should aim to accomplish is, to clear up Butler's idea of 'morality in action,' (for, on this subject we hold his idea to be the true one,) and set it forth in such a manner, that it can neither be overlooked nor misunderstood.

According to Butler, all actions put forth in obedience to conscience are right actions, while those done in violation of conscience are wrong. Such is his criterion of *morality in action;* and how this could have been overlooked by a student and disciple of Butler, may at first view appear very wonderful. But the reason of the oversight may be easily explained. For there is a question concerning virtue in the abstract, as well as in action; in regard to the external rule of right, as well as in regard to the heart of the moral agent. Now, in regard to the external rule of right, or to virtue in the abstract, the system of Bishop Butler is silent; and this silence truly constitutes its most palpable defect. Sir James having confounded these two ideas in his mind, the one relating to virtue in the abstract, and the other to virtue in the heart of a moral agent, and, seeing that Butler is silent in reference to the one, has unwittingly pronounced him silent in relation to the other. McCosh, in his work on the *Divine Government*, repeating the stricture of Mackintosh, has missed the mark in a still more glaring manner. For he says, 'What quality, then, *in the mind of the agent*, may be regarded as constituting virtue? *Butler does not answer this question.*' In fact, this is precisely the question which Butler does answer; and shows that a conformity to conscience is that which constitutes virtue in the moral agent. He fails to answer the other question, however, as to what constitutes virtue, not as it is a quality of the mind, but as it is

the characteristic of the external rule of right. Hence, although his work is the most magnificent fragment which any one mind has ever contributed to the science of morals, yet it cannot with propriety be dignified with the appellation of a system of ethics. It is at best but a one-sided or half scheme.

Even this most acute of moralists seems to have confounded the idea of virtue in the abstract, with virtue in the concrete; and this appears to have been the source of the above-named huge defect in his theory of ethics. For he says, 'There are two ways in which the subject of morals may be treated. One begins from inquiring into the abstract relations of things; the other from a matter of fact, namely, what the particular nature of man is, its several parts, their economy or constitution; from whence it proceeds to determine *what course of life it is which is correspondent to this whole nature.*' Now, as we shall hereafter more plainly see, these are not two methods of treating the same subject, for each relates to a different subject; the one to the abstract rule or standard of virtue, and the other to virtue in the life and conduct.

This confusion of ideas is by no means peculiar to Bishop Butler and Sir James Mackintosh. It is indeed common to most writers on moral philosophy. No other ambiguity can, perhaps, be mentioned, which has done so much to darken and perplex the whole science of morals. It explains the reason why Clarke, who treats of 'the abstract relations of things,' has given us only one-half of a system of morals; and why Butler, who considers the internal make and constitution of the human mind, has produced only the other half. It also explains the reason why each of these half-schemes has so often been mistaken for a complete system of ethics, and why they have been supposed to conflict with each other. There is in reality no conflict between them; and until their mutual agreement and correlation be seen, a system of ethics will be impossible.

The same confusion of ideas has also frequently led the advocates of expediency, or of the will of God, as the standard of right, to deny the supremacy of conscience, and *vice versa*. It is a great mistake of most ethical writers, that they conceive a conflict to exist between the supremacy of conscience, as advo-

cated by Butler, and the adoption of expediency, or the relations of things, or the will of God, as the rule of right; and that the one or the other of these hostile rules must be made to give way before our knowledge can be made to assume a scientific unity and symmetry of form. Whereas all these several schemes or doctrines relate to virtue in the abstract, or to the external standard of right, and do not touch the question respecting the supremacy of conscience over the actings of the mind within. Their office and function is, not to supplant, but to enlighten the conscience. The external standard of right, be it what it may, the relations of things, or expediency, or the will of God, is a light for the intelligence, and not an immediate law for the will. Conscience is this law. Be that standard what it may, it can never annihilate, and should never be allowed to obscure, the indubitable facts of conscience, of this shining perception of right within us, and this felt approbation thereof. The external standard of right is, indeed, no more opposed to the office and functions of conscience, than the light of the sun is to the organ of vision by which it is seen. Hence those who, out of a zeal for expediency, or the will of God, deny this doctrine of a conscience, act about as wisely as one who, from his admiration of the glory of the sun, should repudiate the functions of the eye. And, on the other hand, those who, from a devotion to the supremacy of conscience, overlook or undervalue the importance of an external standard of right, are very like those who, because they possess good eyes, should despise the light of the sun. As in the system of God's world both are found to exist, so in a system of ethics both should be fairly represented; the one as the eye, and the other as the sun, of the moral universe.

Such a system, then, should contain two things: first, it should show what is the distinguishing quality common to right actions; or, in other words, what constitutes virtue in the mind of the moral agent; and, secondly, it should exhibit the rule, or standard, by which the mind itself is to be enlightened in regard to duty. Having established the supremacy of conscience in regard to our own actions, it were an exceedingly dangerous error to speak as if this were an infallible guide, and

that all we have to do is to attend to its monitions. For, indeed, instead of looking within upon our own minds with a sort of self-idolatry, we have to look without in order to behold 'the light of the world.' And how great soever may be our veneration for the dictates of conscience, we should never forget that it is not an enlightening principle, but a principle to be enlightened. We should never forget that, although by reason of conscience we are a law unto ourselves, yet there is a higher law, even a law unto the conscience itself, without attention to which, conscience is but a dark, ignorant, crooked, and perverse guide. We cannot say that Bishop Butler has been guilty of any such forgetfulness, or oversight; but if he has not fallen into this great error, he sometimes seems to lean toward it, with a most alarming tendency downward. Thus, among other similar expressions, he says, 'Man hath the rule of right within; *what is wanting is only that he honestly attend to it.*' Again, 'Let any plain, honest man, before he engages in any course of action, ask himself, Is this I am going about, right, or is it wrong? Is it good, or is it evil? I do not in the least doubt, but that this question would be answered agreeably to truth and virtue, *by almost any fair man in almost any circumstances.*' Hence, if his doctrine be not tainted with the error in question, he has certainly not taken sufficient pains to guard his readers against so great a heresy in morals. On the contrary, his language seems frequently to countenance this heresy, and he nowhere raises a warning voice against it. Hence, even on the supposition that there is no defect in his doctrine, there is certainly a very great defect in his manner of teaching. But, the truth seems to be, that this defect in his teaching arose from the defect of his system, in having failed to reorganize an external standard of right. Having set up conscience as the rule of action, and demonstrated its supremacy over the little world within, he seems almost as prone to regard its oracles as infallible as if it were the light of the great world without.

Dugald Stewart, in his *Philosophy of the Active and Moral Powers*, has explicitly recognized the distinction between the internal or relative rule of right and the external or absolute

rule, as well as insisted upon its great importance.[3] But neither the relation which the external rule sustains to the internal, nor the grand function it is designed to perform, seems to have been rightly conceived by him. His misconception, on this point, may be most clearly seen, perhaps, by considering the manner in which he decides one of the most fundamental and important questions in the science of morals, namely, that which relates to the criterion or test of morality in action.

What is this criterion or test, and how shall we apply it, so as to determine whether an action be right or wrong? 'An *action* may be said to be *absolutely* right,' says he, when it is performed 'with perfectly good intentions,' and 'under the guidance of an enlightened and well-informed understanding.' But, suppose the understanding be not enlightened or well informed, still the action 'may be said to be relatively right, when the intentions of the agent are sincerely good;' or, in other words, when it is performed in obedience to the dictates of conscience.

'According to these definitions,' he continues, 'an action may be right in one sense and wrong in another; an ambiguity in language which, how obvious soever, has not always been attended to by writers on morals.' Thus, according to the author, there are two tests or standards of morality in action; and, as we judge by one or the other of these standards, the very same action may be pronounced right or wrong. If it be performed with 'perfectly good intentions,' and in obedience to the dictates of conscience, then is it relatively right, and the agent is free from all blame therein; for 'it is the relative rectitude of an action which determines the moral desert of the agent.' But if the dictate of conscience, in obedience to which it is performed, be erroneous, then is the action absolutely wrong, or wrong with reference to the external standard of right. Or, as some of the author's followers express it, such an act is right in the agent, and wrong in itself! or relatively right and absolutely wrong!

Now, here the question arises, how can these things be? If an action be right in the agent, how can it be wrong in itself?

[3] Book IV. chap. 5, sec. 3, (p. 561.)

or if it be morally right in one sense, how can it be morally wrong in another sense? Can light have any such communion with darkness? We agree with the author, that 'the distinction between *absolute* and *relative rectitude*,' is 'equally just and important,' but yet, as managed by him, is not the distinction far from having answered the purpose for which it was introduced, namely, 'to obviate the confusion of ideas arising from this ambiguity in language?' On the contrary, has it not introduced fully as much confusion as it has banished, and darkened the science of morals with fully as many enigmas as it has solved?

The all-important 'distinction between *absolute and relative rectitude*,' seems not to have been handled with any greater success by the followers of Mr. Stewart, than it had been previously managed by himself. Dr. Wayland, for example, although he has strongly felt the importance of this distinction, has yet, from the want of sufficient clearness of insight, wrought it into a most elaborate piece of confusion. We refer, as the judicious student of his work may have anticipated, to his famous attempt to show that an action may be perfectly pure and innocent in the agent who performs it, and yet wrong in itself. If this be true, then we may trust, that when the Almighty comes to judge the world, He will punish such an action, not in the agent, but only in itself. We may trust, that in all such cases, He will lay the finger of His indignation, not upon the innocent agent, but upon the criminal abstraction alone.

This is not all. Dr. Wayland, with Bishop Butler, maintains 'the supremacy of conscience,' as the rule of right. But if conscience be the supreme rule of right in action, then one would suppose that an act put forth in obedience to conscience, should be deemed a right act. It may not be so, however, says Dr. Wayland; it may be conformed to this supreme rule of right in action, and yet be very wrong! Now, is not this to make conscience the supreme rule of right in action, and yet deny it to be such a rule? Is it not to make conscience supreme, and yet subordinate? to set that forth as the test of morality in action, which cannot determine whether an act is moral or

immoral? Or, in other words, is it not self-contradictory to affirm that conscience is the standard of moral rectitude in action, and yet pronounce an action wrong which is conformed to this standard? One would certainly suppose so; unless, like Stewart and Wayland, he should happen to have two rules or tests of morality *in action*. But with two such rules, it is quite possible both to affirm, and to deny, one and the same proposition in regard to one and the same action. This seems to be very clearly done by Dr. Wayland. He affirms, for example, the 'supremacy of conscience,'[4] as a rule of right action, and yet declares that 'the doing of right, and obedience to conscience,' are not always equivalent terms.[5]

In like manner, Dr. Alexander maintains the supremacy of conscience as the rule of right in action, and, at the same time, denies that we always do right when we obey its dictates. He begins his chapter entitled, *The Supremacy of Conscience*, with the words, 'That the dictates of conscience should be obeyed, is one of the most evident perceptions of the human mind.' Surely, then, we shall always do right when we obey its dictates; or, in other words, if the dictates of conscience should be obeyed, then we should obey them. Surely we shall commit no sin in obeying that rule which we are under obligation to obey. Is not this clear? By no means, answers Dr. Alexander. 'It is true,' says he, 'if a man's conscience dictates a certain action, he is *morally bound to obey*; but if that action is in itself wrong, *he commits sin in performing it*, nevertheless.'[6] That is to say, a man may commit sin in performing the very act which he is morally bound to perform!

The truth is, that this unintelligible way of talking, this perplexity and confusion of thought, springs from the circumstance, that all these learned authors have adopted two rules of right *in action;* the one *internal*, and the other *external*. Hence it is, that an act is pronounced wrong in itself, when viewed in reference to one of these rules; while the agent, since the act is put forth in obedience to the other rule, is held to be innocent and free from blame. Or, on the other hand, he is declared to have 'committed sin,' in the perpetration of

[4] p. 45. [5] p. 80. [6] p. 68.

an act he was 'morally bound' to perform. But, surely, no two such rules can exist in reality; and every attempt to legitimate such confusion of ideas, must originate in dark, undeveloped, and unilluminated principles of the science.

The rule of right *in action* is one, and not two-fold. As the learned authors themselves teach, conscience is the supreme rule of right in action; and consequently every act put forth in conformity with its dictates, is a right action. Thus, conscience is *the one* supreme, universal, and exclusive rule of moral rectitude in action; and if we introduce any other, or higher rule of morality *in action*, we shall violate that unity of principle, and disturb that harmony of thought, which are so essential to the perfection and beauty of the science.

What shall we do, then, with the external or absolute rule of right? This is a rule, we reply, not for the *will*, but for the *intelligence*. There are two rules of right, it is true, but not two rules of right for *the action*. By one, that is, by conscience, we try the act, or the will; and by the other, that is, by the external or absolute standard of right, we try the conscience itself. If the question be, is the act right? this is to be decided by a reference to conscience; which, as has been said, is the one, supreme, universal, and exclusive rule of rectitude for the will. But if the question be, is the moral judgment right, is the conscience in error? then we appeal to the absolute standard of moral rectitude; which is the one, supreme, universal, and exclusive rule for the intelligence and conscience itself. Hence, as we have not two rules, or two tests, for one and the same thing, so there need be no discordant utterances in our philosophy, or lack of harmony in our views. We simply try each thing by its own appropriate test, and pronounce it right or wrong, good or bad, according as it agrees or disagrees with the standard to which it is referred.

With Butler, and Reid, and Stewart, and Wayland, and Alexander, as well as with a host of others, we maintain that conscience is the supreme rule of moral rectitude in action. But although conscience is the supreme rule of right for the will, it is not the supreme law of the moral universe. If we mistake not, there is in the divine government of the world a

higher and a holier law than this, even a law for the conscience itself.

By viewing conscience thus, in due subordination to the external, absolute rule of right, its supremacy over the will is fortified and secured against abuse. For the doctrine, thus organized, allows no one to imagine that he is free from blame, because his acts or volitions are conformed to the dictates of conscience. On the contrary, it shows that he may have been criminal in the highest degree, just because he has failed to bring his conscience into a conformity with the absolute rule of right, with the supreme law of the moral universe. The first thing he has to do, is to see that his conscience is right, or in conformity with the external standard of moral rectitude; and the second is, to obey its dictates. Hence, if this first, great, fundamental duty be neglected, he cannot absolve himself from guilt by performing the second. Thus, although conscience may justify particular acts, yet, however dark and perverted, it can never justify an evil life.

The above view secures the supremacy of conscience not only from being abused by its enemies, but also from being deserted by its friends. Conscience is the supreme rule of right in action, say they; and yet if we ask, Is it always right to act in conformity with its dictates, they frequently answer, as we have seen, in the negative. That is to say, they frequently teach that it is not always right to act in conformity with the supreme rule of right in action! that although a man is 'morally bound' to obey conscience, yet he may commit a most grievous sin by such obedience! This inconsistency, this denial of their own doctrine concerning the supremacy of conscience, arises from the fear that it may be used as a cloak for an evil life. But, as we shall see, the remedy is not adapted to the evil, and only introduces disorder and confusion into the science of morals.

Suppose, for the sake of illustration, that a man is really disposed to follow the dictates of his conscience, but that its dictates are wrong; what is the remedy in such a case? Should we tell him, that although conscience is the rule of right in action, yet he does very wrong to follow its dictates? Should

we tell him that he is 'morally bound' to obey it, and yet that he commits sin in so doing? Should we thus pull down with one hand what we had so industriously reared with the other, because he seeks to shelter an evil life beneath it? By no means. The remedy for such an evil is far other than this. The true remedy is, not to deny one truth when we should teach another, but to set each truth in its place, and clearly exhibit the immutable relations they sustain to each other. In this way each will impart additional light and strength to the other, and neither can be made a hiding-place for the criminal.

We would not say to such a one, then, that he does wrong in obeying the dictates of conscience, that he commits sin in doing what he is morally bound to do. For how else shall he act? What other guide can he follow? We may set up expediency, or the relations of things, or the will of God, as the external rule of right; but how can he follow any one of these, except so far as it is understood by him, or manifested in his conscience? Can he follow a light which he does not see? It is evident, we think, that conscience is, and of necessity must be, the immediate rule of right, or the moral rule for the will, from the utter impossibility of conceiving of any other.

As in the case supposed, the evil consists in a want of light for the conscience; so we should direct this to the external standard of absolute rectitude, in order that it may be illuminated by the rays of truth. So far from telling such a one that he should cease from obedience to the dictates of conscience, or, what is the same thing, that such obedience is sinful, we should urge him to persevere therein. We should urge him to obey them in all cases, and under all circumstances. We should never cast a doubt on the rectitude of his conduct, in following the supreme rule of rectitude in action. We should never exhort him to forswear allegiance to the authority of conscience, or warn him that such allegiance is sinful. As his mistake and his sin consist, not in obeying the dictates of conscience, not in following the only guide he has, but in not having taken sufficient pains to inform his conscience aright; so we should bring the external rule of right into contact with his conscience, so as to correct its erroneous decisions. This

would be to adapt the remedy to the evil, and not to deny one truth when the case merely requires us to teach another. We should even call in the aid of conscience itself, whose authority is never to be disregarded, in order to show him that it is a duty to use all the means in one's power to enlighten the understanding, and bring it into a conformity with the standard of absolute moral rectitude.

As we have a law or guide for the conscience as well as for the will, so should each be allowed to perform its own appropriate function, and neither be thrust into the office of the other. In this way alone can that disorder and confusion, which has so long disfigured the science of morals, be excluded from the minds of men, and the beautiful harmony of moral truth revealed to them.

Hitherto we have merely spoken of the existence of an external rule of right, or rule for the conscience, and of its relation to the internal rule. But now the question arises, What is this rule or standard of right for the conscience? What is this guide, or enlightener, of the moral faculty? Is it expediency, or the relations of things, or the will of God? No question in the whole science of morals is more important than this; and yet, strange as it may seem, in regard to no other question has the discussion been left in a more incomplete and unsatisfactory condition. Some of the causes which have contributed to this defect in the state of moral science, may be briefly noticed.

Neither Aristotle nor Cicero, as might have been expected of heathen philosophers, have even attempted to do justice to the will of God, as the great absolute standard of rectitude for the universe of created intelligences. Its claims are entirely overlooked by them. The shortcoming of Bishop Butler, in this respect, seems to have been little less deplorable than that of the heathen philosophers of antiquity. He has discussed the rule of relative right with the most admirable ability, with the most wonderful acuteness and power; but having supposed this to be all that is necessary, he is silent in regard to the other, and equally important, branch of the two-fold rule of right. Having supposed that 'a man has *the* law of right within, and *all that is necessary is for him to attend to its*

monitions,' he does not dwell on the importance of seeking and attending to the great law that is without and above himself.

Dr. Paley holds that 'the will of God' is the ultimate standard of right and wrong. But so far from having developed this doctrine, and caused it to appear in a clear and convincing light, he has almost entirely obscured its lustre by an interposition of the doctrine of expediency. Nor is this all. For although he holds up the will of God as the ultimate standard of right, yet is this so presented by him, as to cause a total eclipse of the moral perfections and glory of the Divine Being. If the will of God be the rule of right, says he, then what do we mean when we say that His will is holy, righteous, and good? Do we mean anything more than the silly assertion, that His will is as His will? His answer to this question is one of the most wonderful things in the history of moral science. From the benevolence of God, says he, we infer that He enjoins whatever is expedient, or for the good of His creatures. By means of expediency, then, as a test, we determine what rules are right; according to which rules moral judgments are formed. We even come, in process of time, to apply them to the divine will itself, without recollecting that 'the rules themselves are deduced from the divine will.' But suppose that, instead 'of stopping at the rules,' we should happen 'to observe at the time,' that the rules, according to which we pronounce the divine will righteous, were actually deduced from that will itself, what must be our conclusion? The conclusion would be inevitable, that we merely imagine the Divine Being to possess a holy will, because we have 'established the habit,' by custom, 'of stopping at the rules' deduced from His will; and that, in reality, there is no such moral perfection belonging to His nature. We only seem to ourselves not to go around in this circle; whereas, in reality, we judge of the divine will merely by comparing it with itself. When we say, 'that God acts right,' we think we are saying something; but if we would observe the process more closely, we should discover that we only advance the identical proposition, that He acts as He does act, and not otherwise. Thus, in Paley's attempt to vindicate the divine will as the rule of right, is the glory of

God's moral perfections made to disappear, and absolute, omnipotent will is all that is left upon the throne of the universe.

No writer, so far as we know, has even made the attempt to refute this remarkable passage in the work of Dr. Paley. His doctrine of expediency has been belabored on all sides, and more than a hundred times refuted; while this virtual denial of the moral attributes of God, which forms by far the most objectionable feature of his work, has seldom, if ever, been assailed by his opponents. It has been noticed by Dugald Stewart, but he seems to think that such is the legitimate consequence of making the will of God the ultimate standard of right; and hence, with Cudworth, Clarke, and others, he seeks that standard out of, and beyond the, divine will itself. And as the difficulty mentioned by Paley appeared insuperable to such minds as those of Cudworth, Clarke, and Stewart, so, if it be not removed, it will continue to cloud the minds of thousands of others, and cause them likewise to deny that the will of God is the ultimate rule of right. Hence, the system of morals which holds the will of God to be the absolute standard of right, should place that doctrine on a solid foundation, clear up the difficulty by which it is obscured, and cause it to shine with a clear and convincing lustre.

Nothing can be more meagre than what is said in favor of this doctrine, even by its most recent advocates. Dymond, for example, alleges that 'He who says that the "understanding" is to be our moral guide, is not far from saying that we are to be guided by the divine will; because the understanding, however we define it, is the offspring of the divine counsels and power.' In like manner, Dr. Alexander says, 'That theory which considers conformity to the will of God to be virtue, is undoubtedly correct; for that faculty in us which approves of virtuous actions, was implanted by Him, and is an indication of His will.' Thus, it is argued that the will of God is the rule of right, because the conscience, which was implanted by that will, is so. Now, supposing this argument to be valid, it only proves that the will of God has made conscience the rule of right; and that, consequently, we may be

said to obey His will when we obey the dictates of conscience. It sets forth the will of God, not as the rule, law, or standard, for the guidance of the conscience; but, as a rule of right, it identifies the will of God with the conscience itself. It is true, that when we obey conscience, we obey the will of God; because it is His will that we should obey the vicegerent which He has set up in our hearts. But in a very different sense from this, should the terms be understood, when it is said, that the will of God is the rule of right. This is a rule for the conscience itself, and not the same with the conscience as a rule for the will. If we identify these two rules, then we shall have only one rule of right, namely, the rule of conscience for acts of the will; a doctrine which, as we have seen, can scarcely stand alone even among its friends. A doctrine which Dr. Alexander himself has deserted at times, however strenuously he may have asserted it at others; lest, in teaching that 'we always do right in obeying the dictates of conscience,' he should be found to sanction what is 'wrong in itself,' or contrary to the will of God. Nor can such unsteady, vacillating, and self-contradictory views ever be avoided, unless both rules of right be introduced, and the relation they sustain to each other exhibited, as well as the function each is designed to perform. Such an adjustment of the great principles of moral science seems to be exceedingly desirable, inasmuch as it is believed that it will unite the one-sided views of apparently conflicting schemes in one harmonious whole, and secure them against that liability to abuse which is incident to all half truths. For no truth, if detached and isolated, can possess either the stability or the lustre which it derives from being firmly fixed in its own appropriate place in a well articulated system of doctrine. In such a system, each truth will be found to impart additional support and beauty to the others, as well as derive an additional support and beauty from them. It will be thus, we trust, in regard to the great truths concerning 'the supremacy of conscience,' and the authority of the divine will as the ultimate standard of morality, as exhibited in a true system of ethics.

A theory of ethics should also aim at another object, which

is either not considered at all, or at least not steadily and successfully considered. It is this: those precepts of morality, which are usually found under the head of 'Practical Ethics,' should have a place in the body of the science itself, and an organic connection with its great central truth. As they now exist, they appear like so many detached principles, destitute of a scientific unity or import, and having no connection with what has been laid down in the theory. On the contrary, it seems to us, that after having exhibited the great idea of the morally good, these several precepts should be shown to emanate from this idea as rays of light from the sun. In other words, these separate lights should not be left in this apparently loose and scattered condition; but, so far as possible, they should be organized into one great light to rule by day.

Hence, after having expounded the two-fold rule of right, the internal rule for the will, and the external for the conscience, we should endeavor to show that the latter embraces and contains all the essential elements of morality. If some of these elements be omitted, it should be remembered how very numerous they are; and also, that it is not so much the object of the *science* of ethics to teach us what things are right, as why they are so; that it aims, as Plato truly tells us, not so much to inform us what things are holy, as to point out the common idea in which all holy things agree. Such a reduction of the precepts of morality to its fundamental principle, it seems to us, is essential to anything like a complete reconstruction of the body of the science. Nothing appears more unsightly, indeed, than a meagre half-construction of the science, while its *disjecta membra* are loosely scattered over what is usually called 'Practical Morality.'

But if in pursuing this course, we should omit some of the minor points of morality, we would bring before the mind the discussion of certain great principles, which are usually left out of every division of works on ethical philosophy. For example, we would consider man's accountability for his belief, a doctrine which lies at the foundation of all morality and religion, and without the consideration of which, no theory of ethics can be complete. Since no man can follow the external

standard of right, except so far as it is understood by him, or revealed to his conscience, (just as no eye can be guided by a light which it does not see,) so it is truly wonderful that the great duty of forming correct opinions on moral subjects, or of informing and enlightening the conscience, should have been so little insisted on by moralists. And this is the more wonderful, inasmuch as this has been so zealously denied to be a duty at all by some very eminent writers; by a Baily, a Mackintosh, a Brougham, and a host of others. All that a man has to do, say these writers, is to attend to and follow his own conscientious belief, while for this belief itself, he is not responsible. Hence, the moralist who overlooks this question not only fails to present a complete system of ethics, but he is also inattentive to the best interests of mankind. For, as we shall see, every man has first to inform his conscience aright, and then to follow its dictates. Otherwise he will follow a blind or a false guide. He may be a law, but he should not be a God, unto himself.

But if it be so unspeakably important to form correct opinions for ourselves, in regard to morals and religion, surely the training and cultivation of the intellectual powers by which they are formed, cannot be neglected with impunity, nor even without incurring great guilt. Right here, then, another duty of vast magnitude rises before us, and demands a place in a system of ethics. Though few duties possess greater claims than this upon the attention of mankind; yet, somehow or other, it seems to have escaped the notice of ethical writers. The right of private judgment, which, as Christians and as men, we should all hold dearer than life itself, has, indeed, been abundantly discussed by theologians, and by the champions of the most sacred rights of human reason. But it seems to have been forgotten, or at least not sufficiently attended to, that this is a right coupled with a duty, even the duty of every man to think for himself, and to form those opinions for which he alone is responsible to the Author of his being. That the question of *right* has been drawn into the whirlpool of theological controversy, is no reason why the question of *duty* should be permitted to escape the attention of the moralist. On the contrary,

it seems to furnish a very powerful reason why the great duty on which so much depends, should be placed on its true grounds, circumscribed within its appropriate limits, and vindicated against the plausible objections of the sophist. If this view be just, it thence follows that no system of ethics can be complete which overlooks the great fundamental duty, not only of thinking for ourselves, but also of training the intellectual powers by which such thinking is conducted. Hence, in a treatise on Moral Science, it should be pointed out that it is every man's duty to think for himself, as well as to prepare himself, by the proper culture and training of his mind, for the due discharge of this all-important obligation. For as this duty lies at the very root of all mental development, and of all individual excellence; so the best interests of mankind require that a place should be vindicated for it in the science of ethics.

We are also clearly of opinion, that a complete system of ethics should contain a vindication of the sanctions of the moral law. Indeed, a law without a sanction is no law at all; it is merely a request, or counsel, or advice. It is only when a sanction, either of promised good or of threatened evil, is attached to an injunction, that it becomes a law. Hence, every theory of moral law must be radically defective, which merely sets forth and illustrates its precepts, without an exposition and vindication of its sanctions. In a complete system of ethics, the sanctions of the great law of virtue or moral goodness should be discussed, and especially the doctrine of the eternity of future punishments.

But, although the *science of ethics* really embraces, as the sun does its beams, all the principles and precepts usually arranged under the head of *practical ethics;* yet is the branch of practical ethics, properly so-called, an essential part of moral philosophy. This branch of the science, however, is something very different from what is usually intended by the expression, *practical ethics.* The theory of ethics sets forth the pattern, model, or radiant image of moral goodness; practical ethics teaches the art, or method, of transforming the mind and character, and bringing them into a conformity with that model or image. This view of the nature of practical ethics, opens, it is

true, a wide field for investigation; and if this should, in certain directions, trench on the domain of theology, this is no valid objection to its scope or design. For moral science, whether written by a heathen sage or Christian divine, is not a Godless philosophy.

No other method, we believe, can be found for the restoration of the soul to its original rectitude and purity, than that made known by Christ and his Apostles. For, although these teachers had no thought of philosophy, yet is there, in their plan for the restoration and perfection of the soul, a depth of insight, and a wonderful beauty of adaptation, toward which none of the conceptions of human wisdom make the most distant approximation. As this revealed method has been found, in practice, the only efficient one, so, in theory, it may be shown to be the only rational or philosophical one; and to show this, is the high office of the philosophy of practical ethics. Every system of ethics is, indeed, radically defective, which does not teach the *art*, as well as the *theory*, of virtuous living; or, in other words, which does not show how the human mind may be raised and sustained in the practice of moral goodness, as well as set before it the perfect idea or image of such goodness.

ART. II.—*The Life of David Garrick.* From Original Family Papers and numerous Published and Unpublished Sources. By Percy Fitzgerald, M. A., F. S. A. London: Tinsley Brothers. 1868.

It has been often said, that biography is the saddest department of literature, and our observation inclines us to believe that the remark is, in a general sense, true. But the life of David Garrick forms an exception to the rule. Few men have combined such brilliant professional and social success with so

much of individual happiness. But though eminently happy in his life, Garrick has not been so fortunate in his biographers. Indeed no man has ever been more unfairly represented than he who, during his life, possessed the rare faculty of winning all hearts, and who, at the time of his death, was the most popular man in England. Contemporary biography is seldom unprejudiced; and until recently the only accounts we possessed of Garrick's life and career, except a few short memoirs, were those by Murphy, an Irishman, and Davies, a Scotchman; men who were not only his contemporaries, but who, by the circumstances of their position, were singularly unfitted for the task. Arthur Murphy and Tom Davies had both been subordinate actors in Garrick's theatre, and were associated with the great comedian only in a professional capacity; relations not at all favorable to an impartial judgment. As might have been anticipated, these biographies are confined almost entirely to the theatrical portions of Garrick's life, and, even in this point of view, are very inaccurate and incomplete.

Independently of his wonderful histrionic talent and success, the life of Garrick is so full of interest, that a history of his professional career only, is necessarily very unsatisfactory. He was intimately connected with all the eminent men of his time; he was the chosen companion and friend of nobles and commoners; and his society was eagerly sought by poets, wits, authors, artists, and men of cultivation and genius. Beyond and above all this, he was himself so richly endowed with those qualities which command respect and esteem, that, as Stockdale has well said, 'He was as great in GARRICK as in LEAR.'

There is still another point of interest, which lends an additional charm to the history of his life; we mean the beautiful and romantic attachment that existed between his wife and himself. In every human heart there is a tender place for a love story. That is pre-eminently the 'one touch of nature' which 'makes the whole world kin;' and seldom has the pen of historian, or novelist, recorded the story of a love so true and constant as that of David Garrick and Eva Maria, his wife.

Besides the injustice which the memory of Garrick has suf-

fered at the hands of his biographers, there exists another cause why the great actor has been so misunderstood. Samuel Johnson, who never quite forgave his pupil for being more successful in life than himself, seldom lost an opportunity of saying spiteful things about 'Little Davy;' all of which have been duly recorded by Boswell in a biography, which is more read than any book of the kind in the language. Thus, Garrick has been suspected of 'stinginess;' a failing with which Johnson does not scruple to charge him, although greatly benefitted by the actor's generosity on more than one occasion. This accusation has been urged by other detractors from Garrick's fame, but only by men who were notoriously envious of his position; and it is worthy of note, that during a long career of unprecedented good fortune, in which he was beset by every kind of temptation, this is the only fault which even jealousy has detected in his character. A history of his life is the best refutation of this slander. It is evident, that he was careful and methodical about little things, only that he might give more freely and liberally of his abundance; a trait which has distinguished men most celebrated for generosity.

Some one has said, that the saddest sight he ever witnessed was that of Samuel Johnson weeping bitterly at Garrick's grave. May not the old man have repented in that sad hour of some of his hard sayings? How often when we weep for the lost are the tears of remorse mingled with those of regret!

Mr. Percy Fitzgerald, the latest of Garrick's biographers, claims to have had especial advantages for his work, and to have been 'led to the task by a real fascination for the subject.' Knowing that a certain amount of enthusiasm is one of the surest elements of success, we were led to a perusal of his book with the hope of finding a corresponding fascination in his treatment of the subject. But the two ponderous volumes of loosely narrated facts are a failure as far as any special interest is concerned; although the biographer is more just in his estimate of Garrick as a man than any of his predecessors. As there are writers who, by mere charm of manner, impart interest to the poorest materials, so there are others with the richest stores of knowledge who never rise above the level of

prosaic commonplace. This is just Mr. Fitzgerald's fault, or rather his misfortune. He has conscientiously discharged his self-appointed task, but he is wanting in talent as a *raconteur*, and the most spirited incidents of the actor's life are rendered flat by his rambling, disconnected way of relating them.

When we consider the stock from which Garrick sprung, we can in some degree account for the rare combination of fine qualities which characterized the man. His father was of noble Huguenot blood; and it is probable, that to this French element he was indebted for his vivacity, tact, and exquisite grace. His mother was the daughter of an English clergyman and an Irish lady, and it is not unlikely that he inherited from the Irish side of the house the humor for which he was so justly celebrated, and his ardent, generous nature; while from his English ancestry came the calm dignity which he preserved intact throughout his eventful career, and the prudence and sagacity which made the best use of all his good gifts.

Peter Garrick, or de la Garrigue, as the name was originally spelled, the father of David, was born in Bordeaux. While quite an infant he was brought to England by his parents, who left France in order to escape the persecution of the Huguenots. When he attained his majority, this young soldier of fortune entered the English army as ensign of dragoons, and was soon after ordered to Lichfield. Here he spent many years of his life, and here he met and married Arabella Clough, the daughter of the clergyman of whom mention has already been made. This marriage took place November 13th, 1707. Several years after, Peter, now Captain Garrick, was stationed at Hereford on recruiting service, and it was during the temporary residence of his family and himself at this place, that David, his third child, was born, February 19th, 1716. So, though Lichfield was the scene of the childhood and youth of the English Roscius, it cannot claim the honor of having been his birth-place.

David was remarkable as a boy for his brightness and vivacity; and we find that he began early to practice the sweet courtesy, or 'benevolence in little things,' as Chesterfield so happily expresses it, which was one of the chief charms of his character. When he was about fifteen, his father, who had

retired from active service, and was struggling with the cares attendant on a large family and half pay, found it expedient to re-enter the service and exchange with an officer at Gibraltar; and in the July of 1731 he parted from his family, and embarked for Spain. During the three weary years of separation which ensued, David was the comfort and solace of his afflicted mother, the sunshine of his home, and the regular correspondent of his absent father. His letters at this period are not only remarkable for their affectionate tone, but for a tact which was really surprising in one so young. With a delicacy and consideration, which it would be well for other domestic letter-writers to imitate, he chronicled every pleasant circumstance of the humble life at home, concealing, as far as possible, all that could add to his father's anxieties, and throwing the halo of his own hopeful temperament round the difficulties and troubles he was obliged to disclose. It is easy to imagine that these tender, boyish letters, were preserved by the grateful father, and they form not the least interesting portion of the Garrick correspondence. As we follow his career, his amiability becomes more and more apparent, and an incident connected with one of his schoolfellows contrasts oddly with his undeserved reputation of stinginess. Being one of ten children depending for support and education on Captain Garrick's slender pay, David, while at school, was necessarily obliged to practice the most rigid economy, which was unfortunately mistaken for parsimony. One of his schoolmates by the name of Simpson, the son of wealthy parents, in after life turned out badly. He was idle and dissipated, and, marrying in opposition to his father's wishes, was dismissed in anger from his father's house. In an extremity of poverty and distress, he wrote to ask assistance of Garrick, of whom he had not thought since their school days, but who was now at the zenith of his fortune and fame. Garrick not only sent him a hundred pounds immediately, but wrote to the offended father, begging forgiveness for the son. His first effort was rebuffed with rough discourtesy. But David possessed a sweet persuasive eloquence which could not be resisted long; and he who, at school, had been twitted with 'miserliness,' had the satisfaction of relieving the

wants of the prodigal, and reconciling his father to him. His life abounds with incidents which attest the goodness of his heart; and to this he united a gay, genial temperament, which made him a delightful companion even as a child. His wit, high spirits, and wonderful powers of mimicry, afforded infinite amusement to his comrades at school, and afterwards ripened into the finest dramatic talent of his, or probably of any, age. His first essay as an actor, and indeed as a theatrical manager, occurred when he was not more than eleven, thus affording an instance of the child being father to the man. Having formed his young companions into a dramatic corps, he undertook to give a representation of Farquhar's 'Recruiting Officer.' He assumed the part of 'Sergeant Kite' himself, and, casting the other characters with tact and judgment, patiently drilled his little company until they were perfect in their parts. Samuel Johnson, who, though seven years his senior, and approaching manhood, had already formed a friendship for 'Little Davy,' was applied to for a prologue. For some reason, which does not appear, this request was refused; but it did not prevent the brilliant success of the play. Garrick, especially, performed his part admirably, and Mr. Fitzgerald tells us, that 'The spirit, vivacity, and perfect ease of the young player, were long remembered in Lichfield.' Thus it was that in a 'large room,' before a Lichfield audience, among whom were his delighted father and mother, the first laurels of the English Roscius were won, and we doubt if he ever tasted a purer pleasure than the triumphs of that day.

In the interval which elapsed between this period and his grand début on the boards of a London theatre, he experienced the usual chances and changes of a life without fortune. Not long after the youthful dramatic entertainment, he was sent to Lisbon to enter the establishment of an uncle, who was a rich wine merchant in that place. But this arrangement did not suit him, and we find him soon again at Lichfield. Then we read how his parents struggled to give him a liberal education, and how he became the pupil of Johnson, who taught him Latin and Greek, and laid the foundation of his refined classical taste. We learn how necessary it was for him to earn a living,

and yet how difficult it was to find a profession suited to his peculiar character; and it is interesting to note, that, during the whole period of his childhood and youth, the natural bent of his genius evinced itself by his passionate love of the drama. This taste may have given some uneasiness to his friends, as calculated to unsettle his habits; but it does not seem to have occurred to them, that there was any danger of a gentleman's son adopting the profession of a player. Then comes the pleasant and well-known story of how, in the spring of 1738, Johnson and himself went up to London together, with one horse between them, on which they 'rode and tied.' Johnson, with his heavy tragedy of 'Irene' in his pocket, to seek his fortune in the great metropolis; and Garrick, whose profession, after much planning and debating, had been decided on, to prepare himself for the bar. David had not been in town more than a month, when he was recalled to Lichfield by the death of his father; and then it became necessary indeed for him to begin life in earnest. But it was not easy for one of his mercurial temperament to confine himself to the tedious intricacies of the law, and he abandoned his legal studies after pursuing them for little more than a year.

Fortunately, his rich Lisbon uncle, who died soon after he lost his father, had left him a legacy of a thousand pounds; and, joining this little capital with that of his elder brother, Peter, they embarked in trade as wine merchants. During the three years of its existence, there was a curious contrast between the languishing business of the firm and the gay career of its junior partner. Indeed, there must have been a severe struggle between interest, which would have chained David to the dull routine of trade, and inclination which led him to become an enthusiastic follower of the tragic and the comic muse. It is not wonderful that the wine business did not prosper. David soon became a constant attendant of the theatres, and intimate with all the prominent actors; a frequenter of green-rooms and coffee-houses, where his ready wit, his good humor, and elegant manners, made him an especial favorite. A perilous distinction for one so young and so impressionable in an age of great license. But we do not find that

his pleasures ever degenerated into dissipation. He seems to have escaped, in a remarkable degree, the snares which beset a gay life about town. Even in the tumultuous heyday of youth, he possessed the good sense and moderation, which enabled him to preserve his dignity and self-respect throughout a most varied and eventful life. There is no more bright and pleasant, or well-defined picture, shining out from the dim perspective of the past, than that of David, with his small, graceful figure, his expressive face and luminous dark eyes, enjoying to the full all the pleasures that youth, health, and active mind and spirits, could bestow; and yet so tempering his enjoyments with modesty and refinement, that he never overstepped the boundaries of propriety. It cannot be doubted, that he would have become a player at this time, if he had followed the inclinations of his heart. But the profession was held in even lower esteem then than now, and such a step would have alienated many of his friends, and added another sorrow to the heart of his widowed mother, who, at Lichfield, was grieving her life away for the loss of her husband. This gracious self-sacrifice was characteristic of his loving nature and it did not go unrewarded. In after years, he said, his mother's restraining influence had been of great benefit to him; for had he gone on the stage then, before his powers were fully matured, he would have certainly failed.

Meanwhile, behind the scenes there lurked a greater danger for the young wine merchant, than the adoption of what, in those days, was considered a degrading profession. The charming Peg Woffington, of whom Mr. Reade has given us such a spirited and faithful portrait in his romance, had just made her début at Drury Lane, and was throwing the glamour of her genius and beauty round all who came within her influence. Besides the personal attractions of this young girl, she was only twenty-two when David first met her, and she was, probably, the only performer on the stage at that time who deserved the name of artist. She alone had the courage to discard the stiff movements, and the solemn, sing-song intonations then in vogue, and take nature for her model. There were, undoubtedly, great defects in her acting; but she was natural, graceful,

irresistible. It is not surprising that David fell a victim to the thousand witcheries of this fascinating creature. His enthusiasm for art, no less than his admiration of womanly grace and beauty, was gratified, and he fell in love. Christopher North, in reviewing Mrs. Jameson's *Characters of Passion and Imagination*, says, 'Blood heat is now reduced to the temperature of milk and water in a dairy at peep of dawn, and not a pulse in male or female wrist beats more than sixty to the minute.' But this was not so in David Garrick's day; he, at least, knew what it was to love with the ardor of a young Romeo, and Peg seemed as willing to be won as Juliet. But, fortunately, this love episode was as brief as it was tender. David would have willingly married the enchanting young actress; but her's was a roving disposition, and her fickleness did not promise well for happiness. He was reserved for a better fate. In spite of all her follies, one can scarcely help a feeling of tenderness for the laughter-loving Woffington, with her beautiful face, her kind heart, and easy temper. Of the many stories told of her, there is one which illustrates several of her characteristics. Lord Darnley, one of her admirers, had made her promise that during his unavoidable absence from town, she would not see Garrick. With a caution, which evinced some distrust on the part of the noble gentleman, he had her watched, and on his return charged her with having broken her promise. But Peg declared she had not seen David for an age. Lord Darnley then told her he could prove she had seen him that very morning. 'Well, and is not that an age?' archly and tenderly replied the actress.

In this day of glaring decadence of the stage, it is interesting to read of Garrick's advent, not only as a great actor, but as a reformer, at a time when public taste was, if possible, more vitiated than now. Even Peg Woffington, who had the genius and grace to act the lady in high comedy, owed her popularity chiefly to her dashing impersonation of 'Sir Harry Wildair,' and to what Mr. Fitzgerald calls, 'a weary succession of breeches parts;' a taste which has further developed itself into the entire *sans culotteism* of our day. After the death of his mother, who did not long survive her husband, David's love for the profession

could no longer be restrained. True, there was his brother Peter to be conciliated, which he found no easy task; but David made the most humble apologies for deserting the wine business, which yielded them no profit, and embracing a profession which promised him a brilliant career, and which, to use his own language, he 'doated on.' 'Finding,' he writes to his partner in Lichfield, the morning after his first appearance at Goodman's Fields, 'that both my inclination and interest required some new way of life, I have chosen ye one most agreeable to myself; and though I fear you will be much displeased at me, yet I hope when you find I have ye genius of an actor, you will be reconciled to it.' This first appearance occurred on Monday, October 19th, 1741, in the play of King Richard III., and it is probable that no other performance ever created such a decided sensation in England. When we consider the strained, unnatural movements, and pompous, chanting declamation, which a perverted taste received as acting in those days, we can in some degree realize the enthusiasm with which Garrick was received. The audience were not only entranced with his acting, but amazed at the revolution in art which his genius and courage effected. We can imagine how the house was spell-bound by the fascination of his sweet musical voice, his graceful action, his wonderfully expressive face, and glowing eyes, which mirrored in their turn all the passions of the soul. Smollet, in the *History of England*, pays a tribute to his genius. In reviewing the social progress of the country, he says, 'The exhibitions of the stage were improved to the most exquisite entertainment, by the talents and management of Garrick, who greatly surpassed all his predecessors of this, and perhaps of every other, nation, in his genius for acting, in the sweetness and variety of his tones, the irresistible magic of his eye, the fire and vivacity of his action, the elegance of his attitudes, and the whole pathos of expression.'

Garrick's well-known theatrical career, from this début to its close, which took place when he was about fifty-six, was a brilliant success. It is true, that his life was, at times, embittered by the jealousies and whims of his associates in the profession; but these he always met and conquered with unparalleled firm-

ness and magnanimity; while his modesty, his social and domestic virtues, his untiring industry, no less than his genius, won the love and respect of persons in every walk of life. The theatrical profession is indebted to him, not only for the advancement of art, but also for the bright example of supporting with dignity the calling of an actor. Bishop Warburton writes to him, 'I honor you for your repeated endeavors in stemming a torrent of vice and folly. You do it in a station where most men, I suppose, would think you might be fairly dispensed with, from bearing your part in the duty of good citizens, on such a necessary occasion. Nobody but Pope and you ever knew how to preserve the dignity of your respective employments.' Again, Sir Joshua Reynolds says, 'Not a man, the highest in rank or literature, but was proud to know Garrick, and glad to have him at his table. He continued advancing till the last, and acquired every advantage of high birth, except precedence of going into a room; but, once there, was treated the same as a man of the first distinction. This he never claimed, but was voluntarily allowed him.' Even Samuel Johnson grudgingly admitted that 'Garrick was a very good man, the cheerfulest man of his age, a decent liver in a profession which is supposed to give indulgence to licentiousness.' Then there is Goldsmith's famous compliment,—'An abridgment of all that is pleasant in man.' But it would be impossible to enumerate all the witnesses to his worth. The literature of his day abounds with compliments, which give some idea of the esteem in which he was held by his contemporaries. Fielding, Sterne, Lord Camden, Pitt, Hannah Moore, Pope, Burke, and a host of others who were proud to be his friends, have left testimonials of their love and admiration. In Dublin, where he was first called the English Roscius, and in Paris, where he was fêted and caressed by men and women of wit and learning, he obtained the same high place in the estimation of all who knew him. The French were enthusiastic in their admiration, and paid him the highest compliment that a Frenchman could pay:—'Ce Monsieur Garrick etait fait pour vivre parmi nous.'

With regard to his prodigious industry, we have only to read

of his arduous labors, as a manager, during a number of years; the long list of his performances which seem almost incredible; his dramas; his *vers de société;* his voluminous correspondence; to see that, in his comparatively short life, he accomplished far more than the usual amount of work.

In 1746, nearly five years after Garrick had adopted the profession of a player, there came to London a beautiful Viennese girl, to try her fortune as a dancer. She was called Eva Maria Violette, and there was a romance connected with her pretty name. It was originally Viegel, a corruption of Vielchen, a violet, and was changed by the request of Maria Theresa, who had taken a fancy to the young girl, and had her brought to the palace to be taught dancing with the children of the imperial household. Unfortunately, her exceeding beauty found favor in the sight of the Emperor also, and Maria Theresa, who managed her domestic affairs with the same prudence and vigor that she applied to the administration of her empire, quickly sent the girl out of harm's way. But she was not left friendless. The Violette, whom Walpole called 'the finest and most admired dancer in the world,' arrived in England with letters of highest recommendation to persons of rank and influence, and she at once became the rage of London. Her dancing created a great *furore*, and, what was remarkable in a person of her position, she was admitted into the best society. She was patronized and lionized by women of fashion and rank, who soon learned to esteem her for her goodness and sense, even more than for her beauty. She became the *protégée* of two sisters, the Countesses of Burlington and Talbot. The Countess of Burlington, especially, regarded her almost as a daughter. She was taken to live at Burlington House, and the noble Countess was in the habit of accompanying her to the theatre, and waiting at the wing with a cloak to throw round her when the performance was over. Such adulation would have turned a head less sensible than Violette's; but she was always remarkable for the modesty and propriety of her deportment. This was the woman who was to effect the conquest of Garrick's heart; but the Countess had ambitious views for her young friend, and it was some time before David

succeeded in winning his bride. The tradition runs, that 'the Violette' had seen him in one of his performances, and had fallen in love too; that she became ill, and no one could tell the cause, until her secret was discovered by a physician, who obtained the consent of the Countess by representing the case as one of life and death. Mrs. Garrick used to tell how David once had to disguise himself as a woman, to convey a letter to her. It is certain, that every obstacle was thrown in the way of their attachment, and the Violette was often approached by suitors of fortune and position, who tried in vain to shake her fidelity to her lover. Such constancy deserved to be rewarded, and it was; for they were married, at last, the 22d of June, 1748. The most charming characteristic of this love match was, that, reversing the usual order of things, their married life was even more interesting than the season of courtship. During the thirty years of that life, they were never separated for a single day, and Mrs. Garrick always declared that the honeymoon never ended. Indeed, all who were admitted into the charmed circle of their acquaintance, testified that there was a gallant devotion in his manner to her, which more nearly resembled that of a lover than a husband. Mrs. Garrick lived forty years after his death, and never ceased to bewail the loss of her 'dear Davy.' Garrick's marriage with the beautiful *danseuse* created a great sensation in London. The newspapers were full of it, and for a long time it was the favorite topic of conversation. Some lines sent to David, on the occasion, were found after his death carefully preserved among his papers:

'VERSES SENT TO ME ON MY MARRIAGE.

'What! that heart so wild, so roving,
So prone to changing, sighing, loving,
Whom widows, maids, attacked in vain,
At last submitted to the chain?
Who is the paragon, the marvellous she,
Has fixed a weathercock like thee?'

To which he wrote a reply, containing a faithful pen-and-ink portrait of his wife:

'Tis not, my friend, her speaking face,
Her shape, her youth, her winning grace,
Have reached my heart; the fair one's mind,

Quick as her eyes, yet soft and kind;
A gaiety with innocence,
A soft address, with manly sense,
Ravishing manners, void of art,
A cheerful, firm, yet feeling heart,
Beauty that charms all public gaze,
And humble amid pomp and praise.'

It is not often we read of such a perfect and happy union as that of Mr. and Mrs. Garrick. They were always together, and she shared and heightened all his pleasures and all his triumphs. Their friends were the same, and Garrick never accepted an invitation his wife was obliged to decline. About two years before his death, they received a pressing invitation from some Irish friends, the Caldwells, of Caldwell Castle, to pay them a visit. It had long been one of David's most fondly cherished wishes to revisit Ireland, the scene of so many early triumphs. But, in writing a reply to the Caldwells, 'He regrets that he could not then avail himself of their kindness. It had long been his wish to visit a kingdom where he had been honored with every mark of regard and kindness. He did not quite give up the hope of getting over there, but Mrs. Garrick was so distressed by sea voyages, that he had not been away from her a single day during the twenty-eight years of their marriage, and therefore could not now begin to think of going alone.' It is not surprising that Mrs. Garrick received such tender devotion from her husband. Besides the beauty for which she was celebrated, she possessed those charms of heart and mind which endure long after beauty of person has faded. Joined to these there was a foreign grace and polish about her manners, which made her peculiarly attractive. She was no less admired in society than her celebrated husband, whom Johnson declared to be 'The first man in the world for sprightly conversation.'

Gibbon, in a letter to David says, 'May I beg to be remembered to Mrs. Garrick. By this time she has probably discovered the philosopher's stone. She has long possessed a more valuable secret, that of gaining the hearts of all who have the happiness of knowing her.' La Place paid her the truly French compliment of saying that 'She was one of the most

captivating women in England, though entirely devoted to her husband.' Sterne was a warm admirer of Mrs. Garrick, and constantly sent her the most affectionate messages through her husband. Speaking of her beauty, he said, 'She could annihilate all the beauties of the Tuilleries at a single turn.' There is a pretty story about a portrait which illustrates her husband's gallantry towards her. His portrait had been taken by a painter, who was to receive a hundred guineas for it, and David promised it to his wife. Mrs. Garrick was enchanted with her present, and selected a place for it on the wall. One day, before the picture came home, the artist was invited to dinner, and, in the course of conversation, it was discovered that the faithless painter had sold it to an aristocratic purchaser for a hundred and fifty guineas. Mrs. Garrick's beautiful face shewed how much she was disappointed, and David, wishing to comfort her, whispered, 'Never mind, my dear, you shall have a much handsomer picture than that to look at,' and the next day he had a splendid mirror hung in the place chosen for his portrait. This happy married life extended over a period of thirty years; but it could not last forever. In 1775, disease and suffering warned Garrick that he must retire from the stage. He became incapable of any violent exertion, and found the petty annoyances connected with his profession less easily endured now that he was advancing in years, and often racked by pain. The news of his intended retirement, like almost every step of his public life, created a profound impression in Great Britain. Letters of admiration and regret began to pour in from all parts of the kingdom. He, himself, spoke of his coming emancipation with a pleasure tinged with a tender recollection of all his past triumphs. 'I really feel,' he wrote, 'The joy I used to do when I was a boy at a breaking up.'

During the theatrical season of 1776, he gave for the last time a representation of each of his principal characters, and there has never been such a grand series of performances in the history of the English drama. It would be impossible to give an idea of the excitement that existed in all classes of society. The theatre was crammed to excess every night, and

crowds were sent away disappointed. People came from all parts of the kingdom, and even from distant countries, to see the 'Great Garrick' for the last time. Finally, when he had indeed given his last representation, and came forward to take a farewell of the audience, the feeling on both sides was so intense, that he afterwards described it as 'an *awful* moment, and that he seemed to have lost, not merely his voice, but the use of his limbs, and he thought his heart would have cracked.' Instead of speaking an epilogue, which was then the custom, he thanked, with faltering voice and tears in his eyes, the audience for their goodness. He said, 'The moment was a terrible one for him, now parting forever from those who had lavished on him such favors and such kindness, and upon the very spot where all these favors were received he was now'—here his voice broke down, and he could not proceed for his emotion. Recovering, he added, 'that he should never forget their goodness, and though his successors might have more ability, they could not surpass the pains he had taken to win support, nor the deep gratitude he felt.' The shouts of applause which burst from the crowded ampitheatre were mingled with sobs and tears, and Garrick, casting his splendid eyes for the last time over the brilliant audience, slowly withdrew.

The few remaining years of Garrick's life were spent in quiet domestic happiness, enlivened by a charming circle of friends and acquaintances, among whom were some of the most celebrated men and women of his time. He died January, 1779, in the sixty-third year of his age.

After his death, it was discovered that he whom envious detractors called 'avaricious,' had a large number of annuitants dependent on his bounty. The poor in his neighborhood regretted him as a kind, sympathising friend, and generous benefactor. His nephews and nieces, he treated not only with the affection, but with the liberality, of a father; and many poor actors and authors testified that he had been to them a most munificent patron. One of his most interesting charities, was an annual festival which he gave all the poor children in his parish on the first of May. Mr. Fitzgerald says, 'I

have not the slightest doubt that this was a little *galanterie* in honor of his charming and much loved wife' (a catholic) 'whose name Maria belonged to the month of May.' His wife mourned him as a 'widow indeed' all the days of her life; and the public feeling of regret was well expressed by Johnson, who learned at last to appreciate his old pupil, whom, in derision of his small stature, he called, 'Little Davy.' 'I am disappointed,' said he, 'by that stroke of death, which has eclipsed the gaiety of nations, and impoverished the public stock of harmless pleasure.'

ART. III.—1. *Curious Myths of the Middle Ages.* First Series. By S. Baring-Gould, M. A., Author of 'Post-Mediæval Preachers.' London, Oxford, and Cambridge: Rivingtons. 1866.

2. *The Legend of the Wandering Jew.* Twelve large Designs. By Gustave Doré. Large Folio.

Legend tells us that there walks this earth of ours a mythic being—'der ewige Jude,'[1] as the Germans give expression to our tamer thought—the Wandering Jew; who for eighteen hundred years and more has longed for the silence and unbroken rest of the grave. What the universal heart of humanity instinctively turns from with a thrill of horror, this poor, weary, foot-sore, wanderer of many generations yearns for with an unquenchable craving, which can know no satisfaction till the earth and the sea are summoned to give up their dead, who with the quick of all nations, and kindreds, and tongues, shall stand before the awful majesty of Ahasuerus's insulted God.

Of the origin of this legend, by far the most sublimely beautiful of the mythic creations of Mediæval Europe, we can

[1] The Everlasting Jew.

speak with no certainty. Mr. Grote, in his *History of Greece*, gives a suggestive chapter on the 'Ancient and Modern Mythical Vein,' in which, we believe, is found the key to the rise and growth of legendary history. He attributes the mythological bent of the Middle Ages to two powerful agencies, both of which found their essential life and shelter in the bosom of Mediæval Catholicism. The 'saintly ideal' caught its poetic fire on the altars under whose emblazoned splendors the fleshless bones of some saint, environed with still increasing awe and fable, were shut out from the gaze of men. Year by year, as the cowled mystagogue exposed at stated seasons his treasures for the adoration of the faithful, the power of the relics was augmented, and the miraculous deeds and gifts of the poor soul, whose few bones were not allowed to rest in peace, accumulated so rapidly that monkish extravagance knew no bounds in the domain of the fabulous. The 'chivalrous ideal,' fanned into glowing life in days of high and earnest daring, made for itself beautiful romances, around which the Church flung the tacit sanction of her influence, and the dream of some contemplative monk or nun, under the touches of a preaching friar, became a picture, whose dimly traced aureole, surmounting a head of more than earthly beauty, acted as a charm in chivalric days. To these two types we can doubtless trace the rise of the innumerable legends which still occupy a place in the *Acta Sanctorum* and afford mental pabulum for the cravings of that faith which delights in the miraculous and the supernatural. Mythology, when studied as such, and not presented to our minds as historic verity, affords rich treasures to poet and painter, and conveys to all students aids by which the temper and characteristics of ages long past may more closely be discerned. Too commonly, as Malte Brun remarks, is 'Mythology, in the eyes of our savans, a puerile pursuit, which should be left to little children, and on which any mistress of a boarding-school can write treatises. Poor savans! if a ray of genius had shone on your cradle, you would compose on the subject of Mythology a work profound as the *Esprit des Lois*, pleasing as *Telemachus;* nature would become animated beneath your pencils; all the ideas and all the feelings of men

would take form, life and colors; beauty and valor, genius and wisdom, the formidable destiny itself, would present themselves to your eyes as so many divinities; the sea, the land, and the waters, would be peopled with feeling and propitious beings; the myrtle would sigh with love and the vine tremble with joy. These fables, more immortal than scientific systems, are the touching expression of the perception our soul has of an order of things superior to matter.'[2]

The legend of the Wandering Jew, which Gustave Doré has illustrated with more than his wonted power, was born, perhaps, in some cloister of the Middle Ages. Mr. Gould, in his work on the Myths of that period, attempts the almost incredible task of securing authenticity for the story, based on the words of our Lord as recorded by the three Evangelists,[3] 'There be some standing here, which shall not taste of death, till they see the Son of Man coming in His kingdom.' Mr. Gould dissents from the interpretation (for which there is an almost universal consensus of authorities from the earliest days till the present time) which refers this remarkable passage to the destruction of Jerusalem, and adds the feeble apology,— 'That some should live to see Jerusalem destroyed was not very surprising, and hardly needed the emphatic "Verily," which Christ only used when speaking something of peculiarly solemn or mysterious import.'[4] If, however, we take, in connection with the passage recorded in the first three Gospels, those no less remarkable words of Christ in answer to the interrogation of St. Peter relative to St. John, 'If I will that he tarry till I come, what is that to thee?'[5] we can conceive of no interpretation at all satisfactory, but that our Lord's words had especial reference to the destruction of Jerusalem. If, as Mr. Gould maintains, the language of the sacred writers points to the second coming of the Son of Man, it seems strangely inconsistent with our view of divine mercy, that our Lord should thus address His own disciples as in the first instance; and in the other, hypothetical as the text may be,

[2] Mélanges, tom. iii. p. 264.

[3] St. Matt., xvi: 28. St. Mark, ix: 1. St. Luke, ix: 27.

[4] Curious Myths of the Middle Ages, p. 3.

[5] St. John, xxi: 25.

the reference is to none other than to that disciple whom, on the authority of inspiration itself, we called Beloved. These considerations, if we were at all inclined to adopt the theory of Mr. Gould, would be sufficient to excite our scepticism as to the tenableness of his arguments. It may be that the obscurity involved in the passage gave rise to the legend, and furnished a fitting prop to support it in ages of less light and investigation than our own; but that it originated in Apostolic days, we are by no means willing to admit. The earliest notice of the Wandering Jew is found in the Chronicles of the Abbey of St. Albans, and copied A. D. 1228, by Matthew of Paris, an English writer. 'Eodem tempore floruit fama longe lateque dispersa de Josepho Cartaphila, quem Ananias baptizavit, et qui vidit Christum crucifixum.' An Armenian Archbishop made a pilgrimage to England and enjoyed the hospitalities of the Abbey of St. Albans. He related, in an Oriental language, many interesting particulars of the Wandering Jew. A knight from Antioch, who followed in his retinue, interpreted into French his account of the mysterious personage, whose fame had now begun to spread abroad over Europe. The Archbishop informed his host that he had entertained the poor Wandering Hebrew at his own table, and that he found him to be a man of extraordinary piety; that he was not disposed to lead in conversation, but maintained a resolute silence, which could only be broken by gentle persuasion; that at times the 'errant Jew' would unburden his soul and narrate, with becoming solemnity, the wonderful transactions in which he had been a conspicuous actor; and that the terrible story of the Crucifixion always brought tears of deepest penitence to the eyes of the everlasting wanderer. 'While Jesus was dragging from the judgment hall, he fell exhausted on the threshold, when Cartaphilus, who was porter, pushed him rudely, saying, with a mocking laugh, "Go on faster, Jesus; why dost thou stop?" Jesus, turning a severe glance on him, said, "I go, and thou shalt wait till I return." And according to the word of the Lord, Cartaphilus still waits for His coming; he was then about thirty years old. Each time that he attains the age of one hundred years, he is seized by a strange malady, which

appears incurable, and ends in a kind of trance, from which he awakes as young as he was on the day of the Crucifixion. After the death of Christ, Cartaphilus became a Christian, and was baptised by the name of Joseph. At the present time Joseph generally inhabits Armenia, or one of the other Eastern countries.'[6] Contemporaneous with this account of the Armenian prelate, from whom the details of the story were derived, appeared the rhyming chronicler, Philip Mouskes, Bishop of Tournay, who tells us that 'there came an Archbishop from beyond the sea, full of kindliness in seeming, and he was from Armenia.' The version of the legend differs but little from that preserved in the Chronicles of the Abbey of St. Albans. Cartaphilus, witnessing his countrymen hurrying our Lord to death, cries to the multitude, 'Wait for me! I will see then if they have nailed the false prophet to the cross.' The Chronicler thus proceeds:—'The true God looked upon him and said to him that he should not remain there. *Here* they shall not await thee, but blasphemer, thou shalt await my coming.'[7] The Jew next appears in Arabia, where he passed for the prophet Elijah. Fadhilah, an Arabian chief, who commanded a company of horsemen, tented at nightfall in a valley near the city of Elvau, which he had lately besieged and taken. The evening breeze wafted the solemn strains of his devotions beyond the hills, which echoed back the mysterious refrain, 'Allah akbar!' at the conclusion of each prayer. Fadhilah summoned the strange echo to assume material form and come forth. In response to the request, a venerable man, with snowy hair and beard, presented himself. He assumed the name of Zerib Bar Elia, and related that he was commanded to dwell on the earth till the second appearing of Christ. The story affords no new

[6] Preface to Doré, p. 6.

[7] 'Adonques vint un arceveskes
De çà mer, plains de bonnes tèques
Par samblant, et fut d' Armenie,
Atendés moi! g'i vois,
S'iert mis le faus profète en crois.
Le vrais Dieux se regarda,
Et li a dit qu'e n'i tarda
Icist ne t'atenderont pas,
Mais saces, tu m'atenderas.'

features in the legend, but is, in all respects, a counterpart of that of the Archbishop of Armenia.

For three centuries we lose all traces of the erratic being, but at length he again appears. In the year 1542, in the city of Hamburg, Cartaphilus was seen at church by Paul d'Eitzen, afterwards Bishop of Scheleszving. In a letter still extant, which bears the date of June 29th, 1564, we have a full description .of the Jew, and D'Eitzen's conversation with him. The myth at this period was modified in several particulars, and took that form in which it is now generally received. He changed the name Cartaphilus, by which he was first known, to that of Ahasuerus, and informed D'Eitzen that he was a shoemaker, and that he had witnessed the scenes of Calvary, and had remained alive since that event, wandering in strange countries and among strange peoples. 'He related that he lived at Jerusalem in the time of Jesus Christ; that he persecuted him, believing him to be an impostor, having heard him so termed by the priests and scribes; that finally he was one of those who led him before the High Priest, and demanded His death in place of Barabbas. When the sentence was pronounced, he ran to his house, which lay on the road to Mount Calvary, and, with one of his little children in his arms, stood at his door to see Jesus pass by. Our Lord, laden with His cross, stopped to rest, by leaning against the house of the Jew, who, to show his zeal, pushed him away. Jesus looked at him and said, "I shall stop and rest, but thou shalt go on forever." Immediately the Jew put down his child, and felt himself compelled to leave his house and follow Jesus to the place of death. After that, he left Jerusalem without seeing his wife or children, and wandered in strange countries for about one hundred years, when he returned to find Jerusalem in ruins.' Ahasuerus believed that his punishment on this earth was that of perpetual perambulation, and that in this weary wandering he would know no rest, no respite, till the final consummation of all things terrestrial. The destiny which this undying being was accomplishing, related to his own nation. He was a living witness against his own people, and the monument which his life continually presented to the scattered Israelites, might

soften their stubborn hearts, remove their blindness, and in the end win back the dispersed tribes to an acknowledgment of the Divinity of their crucified Lord. 'He gladly listened to God's word, or heard it spoken of always with great gravity and compunction, and he even reverenced, with sighs, the pronunciation of the name of God, or of Jesus Christ, and could not endure to hear curses; but whenever he heard any one swear by God's death or pains, he waxed indignant, and exclaimed, with vehemence and with sighs, "Wretched man and miserable creature, thus to misuse the name of thy Lord and God, and His bitter sufferings and passion. Hadst thou seen, as I have, how heavy and bitter were the pangs and wounds of thy Lord, endured for thee and for me, thou wouldst rather undergo great pain thyself than thus take His sacred name in vain!"'[8]

In 1575 two legates to the Spanish Court fell in with the Immortal Jew who, they state on oath, spoke the language of the country quite fluently. As soon as he trod the soil of a country, a knowledge of its language was communicated to him in some supernatural way. From the date of his visit to Madrid and Vienna, accounts of his travels become less numerous, and are recorded with caution. J. C. Balenger, in his *History of his own Time*, speaks very guardedly of the popular rumors of the Jewish myth, and evidently shows no disposition to place much credence in the story of his miraculous preservation. In 1640 two burghers of Gerberstrasse in Brussels met this omnipresent Jew in the Sonian wood. They learned that he was 'Isaac Laquedom, who would not let Christ rest on his door-step.'[9] This name, like that of Buttadæus, under which he was elsewhere known, was probably local, and never gained favor beyond the country in which—doubtless, in some circumstance of apparent aptness then understood, but whose fitness of application has long since become obsolete—it originated. The last occasion, of much interest, in which the Israelitish pilgrim again comes upon the scene, is at the beginning of the last century. He appeared in London and secured, for the moment, an ephemeral notoriety. Fellows from the Univer-

[8] Preface to Doré, p. 6.

[9] Curious Myths of the Middle Ages, p. 21.

sities of Cambridge and Oxford, conversed with him, and an Oriental scholar communicated in Arabic with him. He claimed to be an officer of the Sanhedrim, and spoke with the utmost familiarity of our Lord, His Apostles, and their personal appearance. He expressed his thoughts glibly in many languages, and seemed as much a polyglot as Cardinal Mezzofanti. He had known Mohammed and his father, and said that he witnessed the burning of Rome under Nero. From England he extended his travels to Denmark and Sweden; and at intervals since, the mythic personage has reappeared in different English towns. At one time, he works a miraculous cure at Stamford; at another, he attracts a crowd of boys, who follow him through the streets of Newcastle, as he utters in a sing-song, plaintive way, 'Poor John alone, alone! poor John alone!' Sir William Musgrave inscribed a portrait of the Jew, 'Poor Joe alone!'[10] The London *Athenæum* furnishes accounts of the appearance of another impostor who turned up at various periods between 1818 and 1830.[11]

Another version of the legend represented him as the son of a carpenter belonging to the tribe of Naphtali, and that he was born about eight years before the birth of our Lord. In early years he left his father's house, to follow the three wise men, who were guided by a star to the Infant Saviour's manger at Bethlehem. Returning to Jerusalem, his native city, he gave full accounts of the Holy Child, and the costly gifts which the Eastern monarchs bestowed on Him, and the kingly salutation with which they greeted the long-expected Messiah. The Jew's stories were the occasion of the massacre of the Innocents. Afterwards he was employed, as a carpenter, on the cross upon which Christ suffered. His workshop being on the way to Calvary, the soldiers asked that Jesus might enter to rest; but he denied him even a brief respite, and only returned insult to the unoffending victim, who commanded him to wander over the earth until His second appearing to judge the world.

Such is a condensed history of the remarkable legend which,

[10] Brand's Popular Antiquities, Vol. III. p. 361. Notes and Queries, 1st Series, Vol. XII. p. 504.

[11] November 3d, 1866, p. 561.

in earlier times, was piously received by the credulous ear of an unquestioning faith. Its symbolism has been variously interpreted. Some writers think that it represents the state and condition of that strange people, the Gipsies, who, as Sir Thomas Browne in his *Vulgar Errours* remarks, pretend for their vagabond course, 'a judgment of God upon their forefathers, who refused to entertain the Virgin Mary and Jesus, when she fled into their country."[12] Others regard it as an impersonation of the Jewish people, who have no home, no country; who wander in all lands as exiles and outcasts from that goodly heritage which is the joy of the whole earth; and who still long to spread their tents in its lovely valleys; to recline as their fathers were wont under the olive, the palm, and the cedar; to roam, unmolested by the stranger, in green pastures and beside the still waters; to loose their harps from the willows, and make song and melody in their gladness. But to us the legend is replete with deeper and more important symbolism than either of these. It is a word-picture to evoke the religious sentiment of an unenlightened age, and to direct it, by the poor Jew's faith in his own unextinguishable existence, to the tremendous and unutterable danger of those who in later days would put to shame

> 'Their Saviour Christe again.
> If you had seene his death, saith he,
> As these mine eyes have done,
> Ten thousand thousand times would yee
> His torments think upon;
> And suffer for his sake all paine
> Of torments, and all woes.
> These are his wordes and eke his life,
> When as he comes or goes.'[13]

German scholars have bestowed much research in collecting details, which serve to illustrate the changes and gradual growth of the legend of the Wandering Jew. Freutzel under the name of 'Thilo' published his treatise *De Judæo immortali;* Martin Schmied, under that of 'Schultz,' a similar essay *De Judæo non mortali;* and Martin Drascher gives us a couple

[12] Bohn's Ed., Vol. II. p. 205.

[13] Percy's Reliques, p. 330.

of wanderers, respectively known as Ahasuerus and Cartaphilus, He entitled his work *De duobus testibus vivis Passionis Christi.* Novelists, poets, and artists, have each seized the salient points of the Myth and turned them to good account. Croly founded his *Salathiel* on the legend, and wove, with a poet's eye and delicate touch, beautiful landscapes of

> 'Those holy fields,
> Over whose acres walked those blessed feet,
> Which, fourteen hundred years ago, were nail'd
> For our advantage, on the bitter cross.' [14]

Lewis introduces the Wandering Jew in the scene of conjuration in his *Monk;* and few who have read that passage, will forget the power and terror he throws into it. Raymond is haunted at one o'clock in the morning by a spectral figure in the semblance of a bleeding nun. She is eternally repeating a dull monotonous chaunt, and pressing her cold lips to his. Raymond becomes melancholy and is rapidly failing in health. His page, Theodore, meets a strange man, of majestic presence, with a countenance strongly marked, and eyes large, black and sparkling; yet having about him, that which inspires a sacred awe. The stranger bids him tell Raymond to wish for him at the hour when the spectre-visitor comes. The Jew makes an appointment for the Sabbath, for as that 'morning breaks, spirits of darkness,' he says, 'have least influence over mortals.' At their meeting, the conversation becoming general, Raymond found that he could speak of no countries with which his guest was not familiar, and he remarked that his knowledge must afford him infinite pleasure. The Jew 'shook his head mournfully. No one,' he replied, 'is adequate to comprehend the misery of my lot! Fate obliges me to be constantly in movement; I am not permitted to pass more than a fortnight in the same place. I have no friend in the world, and, from the restlessness of my destiny, I never can acquire one. Fain would I lay down my miserable life, for I envy those who enjoy the quiet of the grave; but death eludes me, and flies from my embrace. In vain do I throw myself in the way of danger. I plunge into the ocean; the waves throw me back with abhor-

[14] King Henry IV.

rence upon the shore. I rush into fire; the flames recoil at my approach. I oppose myself to the fury of banditti; their swords become blunted, and break against my breast. The hungry tiger shudders at my approach, and the alligator flies from a monster more horrible than itself. God has set his seal upon me, and all his creatures respect this fatal mark.' The everlasting Jew departs, to reappear in Raymond's chamber as the clock strikes the hour of midnight on the Saturday following. The bleeding spectre still exercises her impenetrable power over the unhappy Raymond, who, in perturbation of soul, longs for the expected hour of release. At length, as the nocturnal hour fatal to the apparition's potent sway approaches, his deliverer enters his room. Salutations were exchanged without words. The Jew took from a chest which he brought with him, a crucifix, chalice, reliques, and a Bible. After devotions appropriate to precede so august an adjuration, he dipped the crucifix in the blood which the chalice contained, and traced a circle, around which he arranged, in a cruciform manner, the bones and sculls. He commanded Raymond to enter within the circle; and in silence and adoration of the crucifix, the exorcist awaited the spectre, whose steps were now heard on the stair-case. One stroke of the clock told the fatal hour, at which the exhumed spirit entered and approached the circle. The Jew with the uplifted crucifix exclaimed three times, with deep solemnity: 'Beatrice!' The spirit in sepulchral voice answered back: 'What wouldst thou?' The novelist then concludes the harrowing scene: 'What disturbs thy sleep? Why dost thou afflict and torture this youth? How can rest be restored to thy unquiet spirit?' 'I dare not tell, I must not tell. Fain would I repose in my grave, but stern commands force me to prolong my punishment.' 'Knowest thou this blood? Knowest thou in whose veins it flowed? Beatrice! Beatrice! in his name I charge thee to answer me.' 'I dare not disobey my taskers.' 'Darest thou disobey me?' 'He spoke in a commanding tone, and drew the sable band from his forehead. . . . . Her countenance expressed reverence and horror, and her visionary limbs were shaken by fear. "Yes, she said at length, I tremble at that mark! I respect

it! I obey you! Know, then, that my bones lie still unburied —they rot in the obscurity of Lindenberg-hole. None but this youth has the right of consigning them to the grave. His own lips have made over to me his body and his soul; never will I give back his promise; never shall he know a night devoid of terror unless he engages to collect my mouldering bones and deposit them in the family vault of his Andalusian castle. Then let thirty masses be said for the repose of my spirit, and I trouble this world no more. Now let me depart; these flames are scorching."'

'He let the hand drop slowly which held the crucifix, and which till then he had pointed towards her. The apparition bowed her head, and her form melted into air.'

Of the novel of *Eugène Sue*, we do not propose to speak, for we are unacquainted with its pages, and at this late day we have no inclination to cultivate a knowledge of that extravagant French school, of which Sue is a faithful expositor. We regard, too, its influence as Satanic; in all respects vitiating to a healthy taste and to good morals. The sooner such literature is consigned to its well-merited oblivion, perhaps the better for the generation to come.

The earliest poetry in which the legend in later times found a place, was the once well-known and popular ballad, which preserves a record of the Jew's visit to Bruxelles on the 22d of April, 1772. A namesake of the great illustrator of the same legend, M. Ernest Doré, set the words of the ballad to music. Béranger's Chanson, *Le Juif errant*, is the finest lyric which this old myth has inspired. It consists of seven stanzas, each of which ends with the same refrain of his unquenchable immortality and exhaustless energy:

'Ever, forever, with vain endeavour,
As Earth spins round and pauses never,
I'm hurried onwards ever, ever,
Ever, ever, ever, ever.'[15]

The lyric represents the Jew imploring a cup of water at the gate of a Christian, to whom he tells the weird story of his

[15] Songs of Béranger, translated by the Author of the *Exile of Idria*, p. 153.

fate. Eighteen centuries have gone since he became an outcast driven by the whirlwind over the ruins of mighty empires. Fain would he linger under the grateful shade of the trees, feasting his eyes on innocent little ones at their play. They recall pictures of his own, and ere the lineaments of his children take shape and form in his vision, the whirlwind drives him on. He stops to survey the ruined heaps of his native city, and to trace the memories of the past, which cling around its mouldering walls, but the angry whirlwind calls again,

'Passe!
Passe! et la voix me crie aussi
Reste debout quand tout succombe
Tes aieux ne t'ont point ici
Gardé de place dans leur tombe.'[16]

The concluding stanza gives the moral of the legend, and we quote it, with the ever-recurring, plaintive refrain:

'J'outrageai d'un rire inhumain
L'Homme-Dieu, respirant à peine,
Mais sous mes pieds fuit le chemin:
Adieu, le tourbillon m'entraine.
Vous qui manquez de charité,
Tremblez à mon supplice étrange:
Ce n'est point sa divinité,
C'est l'humanité, que Dieu venge!
Toujours, toujours,
Tourne la terre où moi je cours
Toujours, toujours, toujours, toujours.'[17]

The later lyric of Chevalier de Chatelain, who has taken the same theme for his verse, does not improve on the Chanson of Béranger. It is little more than a close imitation of a fine

[16] 'Pass, pass on, nor dream of rest
Till the universe expires,
'Tis a lot for thee too blest
To mix thine ashes with thy sires.'

[17] 'When the Man-God groan'd with anguish
With inhuman laugh I jested,
Never since that fatal moment
Have my weary footsteps rested!
Tremble at my wondrous lot,
Harden'd ones, my sufferings see:
God, as man, could pardon not
An outrage on humanity.'

original. We give for comparison only, the third and last stanza:

'Who is this man, so gaunt and weird,
With slow, sad march, with pensive air,
And load of strange remorse and care,
With piteous face and lengthened beard?
Who but the ancient Wandering Jew,
Whom all the winds of Heaven pursue?
To stay his course he makes endeavor
Imploring help in pain and fear,
And still the storm replies forever:
Onward, onward! stopping never,
Accomplish thy career!
Onward, onward! staying never,
Go on, go on, forever!'

Shelley's poem on the *Wandering Jew* gains its interest now as the wild fragment of the youthful atheist of Eton.[18] It is the expression of the fierce and haughty energy which gave dignity at this early age to the 'eternal child.'[19] It bodies forth the sterner lineaments of that Destiny which haunted his steps, and led his lawless fretfulness to seek seclusion and pleasure in the pursuits of chemistry, astrology, and kindred studies. It is the rash, yet timid, echo of the mind of a boy, who was fascinated with a feeble pruriency for forbidden fields of investigation. Well has a contemporary of his said,

'The child is father of the man.'[20]

The imagination which could create, in youth, his *Wandering Jew*, if unrestrained in later years, would transmit to posterity the brilliant but flippant features of *Queen Mab*, in which the poet pursues the Incarnate God to the cross, and depicts the dire revenge with which He curses, in the last throes of death, Ahasuerus His reviler.

'A smile of Godlike malice reillumed
His fading lineaments.—I go, he cried,
But thou shalt wander o'er the unquiet earth
Eternally.——'

[18] *Atheist.* We use the term in a restricted sense. Shelley, while at Eton, received this name, which rather implied (ἀντί, τίθημι) a hater of the 'Gods,' i. e., the School authorities. We have but to recall his *Revolt of Islam*, for further confirmation of our remark.

[19] *Eternal Child.* In a comparison of the portraits of Byron and Shelley, Mr. Gilfillan remarks:—'In Shelley you see the eternal child, none the less that his hair is gray, and that "sorrow seems half of his immortality." '—Sketches of Modern Literature, Vol. I. p. 108.

[20] Wordsworth.

Shelley's poem on the *Wandering Jew* is but little known. No edition of his works, which we have examined, contains it. It is currently and justly considered puerile, for it is but the production of a boy. It appeared some years ago in *Frasier's Magazine*, and as we venture to believe that it is accessible to few of our readers, we are inclined to reproduce one of its more striking passages. The *Third Canto*, from which our extract is taken, is the best in the poem. Shelley's Jew recounts the last scenes in our Lord's life, His resurrection from the dead, and the sentence which gifted the unwearied wanderer with a sad ubiquity. He starts on the *Via Dolorosa*, cursing himself, the mother that gave him birth, and his native land, polluted with unparalleled crimes; seeking in foreign climes a transient respite from the woe which must forever track his ever-onward step. He rushes, on a stormy night, to the gigantic height of Teneriffe, and dashes himself into the darkness of the abyss below, but the unsubstantial clouds bear up his loathed body. He leaps into the sulphurous mouth of Etna, but the flaming cinders vomit him forth again. The very elements combine to thwart his impotent efforts at self-destruction, and refuse to perform their allotted functions:

'Still like the scathed pine-tree's height,
Braving the tempests of the night—
Have I 'scaped the bickering fire,
Like the scathed pine, which a monument stands
Of faded grandeur; which the brands
Of the tempest-shaken air
Have riven on the desolate heath,
Yet it stands majestic even in death,
And rears its wild form there,
Thus have I 'scaped the ocean's roar,
The red-hot bolt from God's right hand,
The flaming midnight meteor brand,
And Etna's flames of bickering fire.
Thus am I doomed by Fate to stand,
A monument of the Eternal's ire;
Nor can this being pass away
Till time shall be no more.

. . . . . .

Till angels of vengeance flit around
And loud-yelling demons seize on thee!

> Ah! would were come that fated hour,
> When the clouds of Chaos around shall lower;
> When this globe, calcined by the fury of God,
> Shall sink beneath his wrathful rod!'

The Myth has furnished the subject of poems by Mosen and Schubart, of the *Undying One* by Mrs. Norton, a philosophical drama by Edgard Quinel, a tragedy by Klingemauer, Grässe's *Die Sage vom ewigen Juden*, and a number of short lyrics and tales, which have appeared at different periods.

From the pictures which the legend vivified in the mind of the novelist and of the poet, we turn to the delineations which it created on the easel of the artist. Gustave Doré's folio depicts the Wandering Jew in twelve wood-cut illustrations, the like of which we have not seen since we wonderingly amused ourselves in childish days over Bewick's Beasts and Birds. We do not believe that copper-plate can trace finer shadows more delicately blended into still softer tints, than these wonderful prints exhibit. We propose to conduct our readers through the gallery of these fantastic, desolate, and grotesque tableaux. The series of plates opens with the scene in which sentence is pronounced against the Jew. Shaded by the dark back-ground of his house, to the left in the picture, stands the cobbler, who has left his last and awl as the noisy procession, wending its way to Calvary, attracts him to his door. With shoe and hammer in hand, he gazes intently on the central figure of the motley crowd. An ungainly, angular flight of steps leads to the entrance of his shop, which is elevated above the dark group below. Over his head oscillates the rude sign-board of his trade. The multitude that are grouped together in the picture represent every phase of Israelitish physiognomy. The traditional characteristics of the Scribe, the Sadducee, and the Pharisee, are plainly visible. The shallow, vacant stare of the sensualist, the blear-eyed, bloated countenance of the selfist and of the debauchee, the vulgar cunning and hypocritical sneer, the mocking triumph and transitory joy, which are traced in the intensely Jewish features of the bevy of men who surround the shoemaker's shop, are painfully repelling; they are powerfully depicted to

awaken horror rather than contempt. As we cast our eye across the picture, we behold the Man of Sorrows bearing the accursed tree up the hill. Nothing relieves the dismal monotony and shocking *abandon* of the scene but the agonizing love which sustains the Virgin Mother, as she assists in supporting the cross of her Son. He tarries for a moment under its weight. Around His head rests a halo of celestial light, and with uplifted hand the despised Nazarene awards the culprit's doom. The *tout ensemble* conveys to our mind as much of horror as the more elaborate studies in the Inferno of Dante, and we are glad to leave such bestial stolidity and infuriate zeal for the less harrowing view of the next plate.

In the second picture Ahasuerus has begun his ceaseless journey. It represents him emerging from a dark ravine, on either side of which are piled gray rocks, whose flinty outlines grow dark against an angry sky. The pitiless storm seems to beat with its fury the briery brush and trees, which hedge around the mouth of the defile. In the back-ground rises a church-spire. The rain and the lateness of the hour, for it is probably the close of day, partially envelop it in mist. Neither the moon, nor a solitary star, is to be seen in the heavens, and yet a lambent light, *that* which sometimes, in Eastern lands, lingers as the sun sinks below the horizon, makes visible the pilgrim's shadow. His snowy beard and loose toga wave in the wind. To the left rises a wayside crucifix, of life-size, whose outstretched arms seem pleading still in mercy; but the inexorable fiat of his fate hurries him on; and, bearing with redoubled weight on his staff, he hastens away from the tender face that looks down from the cross. The scene in some respects resembles the picture which Victor Hugo has drawn in *Les Miserables*. We refer to the night when Jean Valjean entered the good Bishop of D——'s chamber, to purloin his basket of silver. Under the frightful gaze of Valjean, the Bishop slept in profoundest peace. 'The crucifix above the mantelpiece was dimly visible in the moonlight, apparently extending its arms towards both, with a benediction for the one and a pardon for the other.'[21]

[21] Fantine, Book II. chap. 11, p. 64.

Plate third is replete with ludicrous monstrosities, as capricious as they are fanciful. The nomadic outcast lingers in a German town, whose high-arched houses, embattled towers, and grotesque turrets, run into the sky. The buildings wear the marks of age, and seem to blend architectural styles of different periods. Befitting domiciles they are, for spectral shapes and Dutch hobgoblins! Around the veritable Jew, is gathered a heterogeneous group, whose beseeching curiosity is itching to hear fuller details of the strange story of his life. The burgomasters, in enormous wigs, and periwigs, and pigtails, hedge him in; while, at his left, a donkey, surmounted by a jolly *hofkuchenmeister*, nibbles away at his flowing beard. A half-dozen geese, and a few children, saucily peer up in the old man's face, apparently as much interested and absorbed as their betters. In the rear, the Demon of Fate is poised, and with lance thrust toward the Jew, urges him onward, who is seeming impatient to advance.

The next Plate contains the Teutonic scene, only there is a Gothic brutishness about the whole, that gives it less interest than any of the engravings in the series. He has been reviving the inner man in a '*bierhaus*,' and has reached the last step from the door, when two capacious, bloated '*bieresel*,' as the the Germans call the ale-house loungers, are vociferous in their entreaties for him to remain. A loutish woman presses upon him the proffered beer-mug, and to her aid comes another besotted figure with the well-laden jug, while at his knees still another termagant imploringly craves his longer sojourn; but elevated among the spires and towers is seen the sad face and snowy form of the angelic ministrant, whose averted sword directs him to his weary way. An expression of anxious pain is on his countenance, which seems to say

> 'Day and night my toils redouble:
> Never nearer to the goal,
> Night and day I feel the trouble
> Of the wanderer in my soul.'

Plate fifth presents a higher and a more imaginative picture, the back-ground of which is filled with innumerable trees that embower an antique castle; above all is visible its crumbling

towers and walls, overgrown with moss and vines. On the brow of a woody hill, a wayside chapel points its cross heavenwards. Below, runs a river, across whose surgy waters Ahasuerus wends his way. He travels on with redoubled speed, for in the restless waves the glimmer of the moon reflects our Lord bearing the cross. The utter desolation of the whole scene is wonderfully portrayed. We almost fancy that we hear the keen wind whistling through his garments, and see the elfish spirits that lurk in the shaggy trees.

But the artist's creative pencil mirrors in the next Plate scenes of still loftier power and tragic terror. At midnight the restless fugitive is passing through a gloomy church-yard. Before him stand the white sepulchral stones, like so many ghosts just risen from their narrow beds in the valley of death. The lurid moon-beams make grim shadows athwart the picture. In the dusk of the forest, in the trunks and branches of the tall fir trees, in the fleecy clouds, and in the belt of broken rocks—in all that the eye can rest upon—the same vision greets him in his flight. His own shadow even outlines the same form, which is poised in the pulsing lustre of the heavens. From out the tower windows, the church bells are swinging to and fro. No hand had stirred their iron tongues. They are the 'soul-bells'[22] of a departing brother, who is crossing the dark river. They remind the poor Jew that no passing-bell will ever ring out the tocsin of his earthly release, or ever call the faithful to join in solemn intercessions for his perfect consummation and bliss in the Paradise of God.

In the seventh Plate, the solitary traveller pursues his jour-

[22] *Soul-Bells.* Wheatly says, 'The passing-bell indeed is now generally disused, and only the short peal continued, which the canon orders to be rung after the party's death.' He adds, however, that it was formerly used 'to give notice to all within the sound of it, to put up their last and most affectionate prayer for their dying neighbor, and to help their friend in those last extremities which themselves must assuredly one day feel.'—On the Common Prayer, p. 457.

The use of the soul-bell was, at an early period, very general in England. In Strutt's Manners, III., 172, we find the following: 'Item, the clerke to have tol'ynge of the passynge belle, for manne, womanne, or childes, if it be in the day, iiij*d.* Item, if it be in the night, for the same, viij*d.*'

In Shakspeare's Henry IV. we have—

'And his tongue
Sounds ever after as a sullen bell
Remember'd knolling a departing friend.'

ney through one of those wild recesses of nature, which we people with all manner of creeping things, from the viscous lizard and slimy toad to the venomous viper and the winged scorpion. He treads a narrow path on a ledge of rocks, whose surface is matted over with a spongy moss. The flabby excrescence yields under the pressure of his step, and to keep his feet he leans his weight on the rude staff, that often before has supported him in benighted regions. Nothing breaks the portentous solitariness of nature, save a water-fall that dashes down over the rocks. From out the clefts and crevices of the craggy mountain side start trunks of trees, which assume monstrous shapes and forms; but, above them all, appears the old vision that gives him respite neither by day nor by night—the ever-present Lord sinking under His cross. In mid-air, above the jagged rocks and broken trees, soars in snowy vesture the Messenger of Fate. In her hand she bears a fiery sword, the white, wavy blade of which is lost in the mists of the mountain's top. The perfect symmetry and delicate poise of this flying figure, render it the master-stroke of all the plates. It is particularly worthy of a long and careful scrutiny. In such delineations, we believe Doré to be unrivalled. We proceed to the Eighth Plate.

High among the sterile mountains, on a plane of rocks, he stands, his left hand grasping the rugged projection, and his right the staff. Thus, with upturned gaze, he supports himself from the precipice immediately in his front. Every object that surrounds him only adds to the awe with which the wretched man beholds the eternal vision of his destiny; for among the snowy peaks rises the self-same image of our Lord. The arid aspect, the sickly herbage, and the withered stillness of the landscape, grow more painfully palpable, as the morning aurora steals through the cloud-tipped peaks, which seem but to recede into the airy forms and misty outlines of Apostles, Martyrs, and Holy Virgins; for we can dimly trace the halo which encircles their heads.

> 'Transfix'd with awe, he feels his God is nigh,
> And conscience-stricken, looks on Calvary.'

We are now entering an entirely new phase in the wander-

ings of this Jewish Fakir. With but two exceptions, his journey lay hitherto amid wild wastes, trackless defiles, or mountain passes. It was amid the profoundest solitudes of nature, far away from the busy outgoings and incomings of man. Now we see him in the days of the Crusades, the same time-worn and weary wanderer. In the back-ground loom up castellated towers and turrets, below which runs a line of parapets. The picture represents a battle-scene. An innumerable host is in close conflict. Myriads upon myriads of blades gleam in deadly array; but on a rise of ground, strewn with dissevered arms and legs, headless bodies, and ghastly relics of blood and carnage, stands the deathless being, firm of step, and undaunted by all the sanguinary 'pomp and circumstance of war.' Near him, a legless knight, with copious streams of blood pouring from the femoral arteries, draws back the arrow with unabated courage, while to the left another, without arms, clinches the thirsty blade between his teeth, and wields it in mortal combat. Two hearts, sole vestige of their possessors, puff and blow their smoke at each other. Amid this disgusting spectacle of bleeding corpses and convulsive limbs, the Jew threads his interminable course. With averted mien, he scowls back on the riotous scene, through which he has securely passed.

From this truculent pageantry of death he is borne, in the next Plate, to the no less destructive waves of the maddened sea:

> 'Man marks the earth with ruin—his control
> Stops with the shore; upon the watery plain
> The wrecks are all thy deed.'[22]

Dashed high against a rocky promontory, lies a wrecked vessel, the cordage and rigging of which are rent to pieces, and dance in the gale. Some of her crew still cling to the detached cable and hawser. Others are struggling amid the breakers below, while others, again, in desperation hug a shaft shivered adrift from the mainmast. An enormous son of Neptune opens his ponderous jaws, and is in the act of gulping down the splintered beam and its parasitical pirates. Amid this wreck of lives and crash of matter, the Jew ploughs on through

[22] Byron's Childe Harold.

angry billows, unmindful of the pairs of hands which clinch his beard, or fain would cleave to his pilgrim's staff for safety. The moving storm-clouds again bear on their vapory bosom the flaky memorial of the Son of Man:

'Where shall I sojourn? What kind sea will hide
My head from thunder? Where shall I abide,
Until his flames be quench'd or laid aside?
What if some solid rock should entertain
My frighted soul? Can solid rocks restrain
The stroke of Justice and not cleave in twain?
Nor sea, nor shade, nor shield, nor rock, nor cave,
Nor silent deserts, nor the sullen grave,
What flame-eyed Fury means to smite, can save.
'Tis vain to flee; till gentle Mercy show
Her better eye, the farther off we go,
The scourge of Justice deals the heavier blow.'[24]

Plate Eleventh places him in another of Nature's dismal lurking-places, but the hideous inhabitants are not the creatures of a fervent imagination. They body forth a very uncomfortable reality. A parietal range of rocks and fir trees in the back-ground, closes in a cavernous area, in whose rank and overgrown purlieus skulk loathsome reptiles and enormous beasts. The sound of his footsteps along the margin of the sluggish pool, startles to its fetid surface a multitudinous brood of lizards, toads, snakes, crocodiles, and alligators, who scamper towards him. The lion, awakened in his lair, has mounted a rock, and follows him with his restless eyes. An hippopotamus growls and grins at his very elbow. An elephant's trunk scents him through the tall firs. At his feet lies a monster snake; his foot and staff have touched the coil, and the venomous creature whizzes at him; while in the rear, a huge boa, partly curled around a tree, hangs hissing in his ear. Through this harrowing labyrinth of living horrors, the Jew trudges on unharmed. Verily, it is the precursor of the end of that strange Nemesis!

'Ah! whither shall I fly? What path untrod
Shall I seek out to 'scape the flaming rod
Of my offended, of my angry God?
Great God! there is no safety here below;
Thou art my fortress, thou that seem'st my foe:
'Tis thou, that strik'st, must guard the blow.'[25]

[24] Quarles. [25] Quarles.

The pilgrim's staff is laid aside, the aching feet are freed from the tattered boots, for his journeyings are over, his retributive career is accomplished, and the dawn of the Last Day ushers in the end of all things. Seated on a rock, the worn-out wanderer dreamily surveys the scene that is enacting before him. His face wears an expression of utter exhaustion. The end has unnerved him, and he seems impotent as though paralyzed by the reaction of generations of flight and vicissitude. The contentment of his countenance is rather indicative of physical alleviation than supernal joy. Of this last Plate in the series, we may remark, that Doré has called to his aid the ordinary expression with which his art clothes the consummation of earth and the advent of our Lord. In the right of the picture, a legion of celestial trumpeters blows a blast, which is wafted in amid a coruscation of divine irradiancy. In the darker tints, an angelic being sounds a note in the ear of the Jew. It may be the pæan of his deliverance—the signal that is to loose the chains, and set the captive free. The ministering spirit of Fate is transformed into the messenger of mercy. In a corner of the print, the earth has opened, and out of it are emitted flames and smoke. The smirking imps and fiends are gathering in their share of spoils, and gloat over the fatness of their empire. The scene teems with reanimated life. The eyeless socket lends a hideousness to the semi-resuscitated skull, only equalled by the twitching of fleshless bones. Some are not only rehabilitated in their fleshly bodies, but encased in armor of steel. Others, again, are arrayed in the cerements of the grave. Grotesque forms, in inconceivable costumes and attitudes, greet the eye. In fine, all the pictorial concomitants of resurrection occupy a place in the last scene of the legend of the Wandering Jew.

In closing this folio of horrors, we cannot but feel that it is *well* that Doré's genius found in the history of the Jew only a legend to illustrate. If the story, as some would vainly persuade us to believe, had a shadow of probability in it, the creative power of the artist had then only brought into being representations of a life, which would haunt us as an ugly dream to our latest day. If it were other than mythic, we

should implore our readers, for their own peace of mind, never to know, by this beautiful work, how masterly and how touchingly sublime Doré's pencil can be; but the surety of its legendary character has made it, to us, a study of exceeding interest, and, may we not add, of profit?

We are unwilling to express any disappointment at the selections of scenes which Doré has chosen for his illustrations of the Myth. Some are too gross altogether, to satisfy our conviction that his taste in art is always trustworthy; though if this were the only charge to be made against the illustrator, he might rest secure in the verdict of his age. But, now that he is directing his attention to a kindred pursuit, the higher form of art, we may speak with more confidence of the defects, which, in all likelihood, will detract from the fame which he may achieve in painting. The tragic in art or in literature depends, for its success, on a right conception in the mind of the artist or poet, of the essential elements which should mould the impersonation. Too much labor cannot be bestowed on details, for the closer each minute circumstance is considered and weighed, the more clearly defined appear the differences between what is truly tragic and what is simply startling or revolting. Doré has so exclusively made his studies in the weird, the grotesque, and the unreal, from choice perhaps, that his efforts in expressing the modern, the real, and the human, in life, rather produce caricature than a counterpart of nature. In the rich field that Dante's *Inferno* opened to him, he reveals a vividness and power which are inimitable. The torturing spectacles which the lost suggest to his mind, move his pencil with an inspiration that adds a new fascination to this portion of the *Divina Commedia*. In *Don Quixote*, Doré exhibits too strongly the irrational side of his hero's character. A study of his illustrations leaves on our mind a decided impression that, after all, Don Quixote was a crazed rather than a perverted creature; while the humorous element in Sancho Panza is totally lost to view or displaced by the less welcome aspect—the ridiculous in his character. The farther removed his subjects are from the range of the hideous, the improbable, and the detestable, the feebler grows his hand, and the more pain-

fully revolting the conception which he seeks to reduce to form. We think, with pleasure, of the illustrations of the *Contes Drolatiques;* only, a few sketches provoke us by their grossness. And yet no work from which he has made studies, offers at every turn such scenes as these, in which Balzac rivals in coarseness the vulgarities of Fielding's *Tom Jones.* The delineation of the lover cut in twain, (in a scene kindred to *Le Moyne Amador,*) and the heart leaping toward the object of its affections, is a monstrosity as ghastly as it is shockingly revolting. Other studies show, perhaps in a less degree, the same fantastic contortions, which are anything but pleasant to the eye. The *Paradiso* presents a scope which, in its more ethereal nature, render's Doré's illustrations of Dante's conceptions of rest wholly uncomparable with the success of the *Inferno.* He seizes the terrifically sublime in the one, and moulds it into plastic shape; but he fails to express a tithe of the tenderly sublime in the other. In *Elaine,* one of the Idylls of Tennyson, he conveys to our mind about as exact a portraiture of the heroine, as a lewd Dutch girl would, whom Hogarth might have introduced with a more becoming propriety into the *Rake's Progress.* His pencil has produced simply a caricature. Much might be said, too, of his *Lancelot,* and the misconceptions and distortions of the poet's verse; as, for instance, Doré mounts his King Arthur, who descends a mountain ridge, and Tennyson's verse at least suggests that he came on foot,

> 'And *laboring up the pass*
> All in a misty moonshine, unawares
> Had trodden that crown'd skeleton.'

We note only one of many such inaccuracies with which the *Idylls of the King* abound, and especially *Elaine.* The knightly Sir Lancelot, albeit stained with sin, yet courtly still, 'a man not after Arthur's heart,' and sinful Guinevere, who loved him, instead of Arthur, her liege lord, queenly, womanly, yet lacking the high fortitude to act out the better promptings of her better nature, but at the last bitterly penitent, and owning the nobleness of him she wronged—these two portraitures of the Poet Laureate's ripened power, Doré has failed to grasp.

His illustrations of the Bible merit the criticism of Ruskin, whose opinions on subjects relating to art, always claim a high consideration. Extravagant and paradoxical as his statements sometimes appear, we cannot but perceive the justice with which he deals both with Doré's *Tennyson* and with his *Bible.* 'It is to my mind,' he says, 'quite as significant, almost as awful, a sign of what is going on in the midst of us, that our great English poet should have suffered his work to be thus contaminated, as that the lower Evangelicals, [*i. e.* radicals,] never notable for sense in the arts, should have got their Bibles dishonored.' A few illustrations in his *Bible* call for no stinted praise, and we can think with pleasure of the chaste and unaffected beauty of his *Susannah* in the *Apocrypha;* but the sacrilegious vandalism with which he has treated the scene of the *Crucifixion*, is hardly compensated by the mastery of touch he displays in the arrangement of light and shade and the command of perspective, in other designs. No picture of the Crucifixion can satisfy the unexpressible conceptions with which humanity idealizes the last event in Christ's life. It lies beyond the region of the brush of the greatest genius, and the inherent fault of art reproductions of it is not in the artist but in the subject. Who can pencil the inconceivable sorrows which no tongue can clothe in human language? What attitude can art lend, by which the Divine in union with the Human in our Lord will convey half that we feel of the stupendous tragedy? If the closing scene can never be brought within the scope of the painter, at all events, it can inspire an awe which will reverently elevate the artist's mind, and guide his pencil in embodying, however feebly, *that* which is, in its very nature, incommunicable. Doré does violence to religious susceptibilities, and degrades the noble mission of his art, in his representation of the Crucifixion. We turn in disgust from the picture in which, as by derision, he has made an insignificant cur a witness of the Passion. If judged by his works, he has little religious reverence, and we wish that he possessed a little of that devotional trait of mind which deterred our Allston from making Christ and His Apostles, as Dr. Channing remarked, subjects of his brush.[26] Art, in its grandest and

[26] Ware's Lectures on Allston, p. 14.

highest form, is the hand-maiden of truth. It speaks the language of the inner courts of the Sanctuary of our God. To beget and to elevate the aspirations of our humanity, is its sublimest mission. Schiller, with a strong hand, teaches the artist his duty: 'Free alike from the vain activity that longs to impress its traces on the fleeting instant, and from the discontented spirit of enthusiasm that measures by the scale of perfection the meagre product of reality, let him leave to common sense, which is here at home, the province of the actual; while he strives, from the union of the possible with the necessary, to bring out the ideal. This let him imprint and express in fiction and truth; imprint it in the sport of his imagination and the earnest of his actions; imprint it in all sensible and spiritual forms; and cast it silently into everlasting Time.'[27]

ART. IV.—1. *Newton's Principia.* New York: Daniel Adee. 1846.

2. *Dissertation on the History of the Mathematical and Physical Sciences.* Part II. By Professor John Playfair. Boston: Wells & Lilly. 1820.

It is one of the sayings of Aristotle, that 'If motion be not understood, we cannot but remain ignorant of nature.' Though Aristotle may not, it is true, have seen all the depth and beauty of his own remark, yet has its justness been illustrated and confirmed by the whole subsequent history of natural philosophy. Indeed, it has now become a maxim, that 'the true theory of motion is the key to nature.' It was with this key, first constructed and fitted for use by Galileo, that Newton, the great high-priest of nature, entered into her most profound

[27] Ueber die aesthetische Erziehung des Menschen.

recesses, and laid open her most sublime secrets to the admiration of mankind.

Just in proportion, then, as our notions of the great laws of motion are clear, precise, and steady, will nature become transparent to our view, and unfold its beauty in cloudless splendor. The truth of this remark is seen in the consequences of every improvement in the science, or theory of motion. For every such improvement, like an improvement in the telescope, has extended the range, and cleared up the field, of our vision into the wonderful mechanism of the material universe. We shall endeavor, in the present paper, to illustrate and establish this position, in regard to the great fundamental law of *inertia;* which is usually, and very properly, laid down by philosophers, as the first law of motion.

What, then, is meant by the *inertia* of matter, and the law which springs therefrom? If we look around us, we shall at once be struck with the vast difference between two classes of objects. We shall see organized, living, spiritual substances; and substances which are wholly dead and passive. In the one we shall perceive, (*i. e.* by its manifestations,) an inherent principle of activity; in the other, we shall discover only a lifeless mass of matter. This we call inert; because it is wholly destitute of a power to act. An instrument of power it may be, and indeed often is; but in and of itself it is perfectly powerless. Hence, if placed at rest in any point of space, it will continue in a state of rest forever, unless driven from its position by some extraneous force. This constitutes the first branch of the great law of *inertia*. This branch of it is easily grasped and retained by the mind. So far, then, we have no difficulty; we are in danger of no error, of no illusion.

But the second part of this great law, is not so easily conceived, nor so readily held with a firm grasp. It is to be reached and realized only by an act of sustained reflection; and even after it has been thus reached and realized, it will often prove an exceedingly unstable element in our minds, and be often found to desert us when our logic most stands in need of its presence, and its power. As we are about to enter upon this slippery ground, then, let us determine to do so with a

clear eye, and a firm step. Let us fix our minds upon this second branch of the law of *inertia;* and hold them to it, until it becomes as clear and fixed as the noonday sun. Let us look at it, until it ceases to seem a vague, dim, shadowy, wavering element of thought, and comes to stand before us, clear and bright, like the adamantine pillars of heaven and earth. Then shall we be able to see our way clearly, where, otherwise, clouds and darkness would overspread our path. Then shall we be able to advance steadily, and with conscious power, where otherwise we should be compelled to grope our way timidly amid the manifold mists and obscurities of nature.

The idea we should thus realize is this: If a body be put in motion, it will continue to move in a right line forever, and with a uniform velocity; unless accelerated or checked in its career, or turned from its direction, by some extraneous force. This is the second part of the great law of *inertia.* It is one thing to hear it—it is one thing to think we understand it—and quite another to possess that full, clear, and perfect comprehension of it, which can only be attained to by severe meditation. We do not wish to deal in paradox, or to startle the reader by extravagant assertions of any kind; but yet we must say it, because it is our profound conviction, that, although this law is in everybody's mouth, not one natural philosopher in a hundred is in full possession of its import; and even those who have realized it the most fully, are often betrayed into errors of logic, and false interpretations of the phenomena of nature, by permitting it to elude their attention. The truth of this remark will appear, we trust, before the conclusion of what we have to say.

The ancients do not seem to have caught the most distant glimpse of the great law in question. Every portion of the physics of Aristotle betrays a profound ignorance of its existence. His well-known division of motion into *violent* and *natural*, is one instance among many, of his having wandered in the dark, from a want of the light of this law. So far from perceiving that all motion is natural to body, as perfectly natural, indeed, as is a state of rest; he supposed that some sort of violence was done to matter by forcing it to move, and that

such motion would run down of itself, without any cause of its extinction. It would languish and gradually die away, he imagined; because its existence was contrary to the nature of body. Hence, instead of attempting to explain the phenomena offered to the senses by any *known* principle, or even according to any clearly defined idea, he had recourse to the fanciful distinction between *natural* and *violent* motion; one of the most vague, dim, and impalpable notions that ever cast its shadow over the brain of man.

The later writers of the Aristotelian school of physics expressed this famous distinction in verse. The law of natural motion was:—

'Cool at the first, it warm and warmer glows.'

That of violent motion:—

'Hot at the first, then barely warm, then cold.'

The poetry may not be good; it is certainly better than the philosophy. If we had been told that some motion runs down of itself, while other motion is accelerated, because all this is natural, we should have received all the information which could possibly be derived from the distinction in question; and that is precisely no information at all. And then, this pompous nothing is set forth in such a distressing circumlocution of words; it had been far better expressed thus: *it is so, because it is so.* For this would have shown the idea as it is in itself, or rather as it is in its own naked nothingness; and relieved the intellectual void from the pressure of mere words, that it might return to its old craving after ideas.

If Aristotle had possessed the law of *inertia*, it would have spared him the labor of constructing a mass of false logic, which it would require a volume to point out. One or two instances only, shall we at present adduce. 'Circular motion,' says he, 'is the only one which can be endless.' Now, why is this the case? Why is it impossible, in the very nature of things, for motion to proceed in a right line forever? 'Because,' says Aristotle, 'that cannot be doing which cannot be done; and therefore it cannot be that a body should be moving

towards a point (*i. e.* the end of an infinite straight line) whither no motion is sufficient to bring it.' Thus the law of *inertia*, which is really true, is shown to be an inherent impossibility. Is it at all wonderful, that men should have failed to institute a close and searching examination into nature, when they could so easily mistake fancies for laws, and the great problems of the material world could be so easily settled by a few admirable strokes of logic?

It was necessary to come to the conclusion that 'circular motion may be endless,' in order to account for, or rather not to contradict, the apparent motions of the heavenly bodies. These were supposed to be natural in the highest sense of the word; and, therefore, not liable to decay, like the motions of earthly objects. They were supposed, indeed, to constitute a distinct class of motions, and to be governed by wholly different laws, from the motions of the sublunary sphere. It is even argued by Aristotle, that the motions of the heavenly bodies must be uniform, because it is beneath the dignity of such divine objects to move sometimes faster and sometimes slower. Thus it was proved, that their motion was not only circular, but also eternal; for so long as the motion is uniform it can never come to an end.

So far from perceiving, that if the motion of a body be not disturbed, it will move in a right line forever, Aristotle has attempted to demonstrate that it is utterly impossible for it to move in a vacuum at all. To give the substance of his argument: The rarer a medium is, the faster a body will move therein; but since a perfect vacuum is infinitely rarer than any medium in which motion has been observed, the motion of a body in it would be infinitely more rapid than in a resisting medium; that is to say, it would pass from one point to another *instantly*, which is impossible. Thus he argues, that if a body could move in a vacuum at all, it must move with an infinite velocity, or pass over some space in no time, which is impossible; and hence, he concludes, it cannot move in a vacuum at all.

Our readers have, no doubt, heard the famous exclamation of the affected lover in one of Dryden's plays:

'My wound is great because it is so small:'

And also the extemporary line of the Duke of Buckingham, by which this nonsense was wittily exposed:

'It would be greater were it none at all.'

Now the argument of Aristotle is precisely the logical antipode of this; for he proves that in a vacuum the motion of a body would be so great, it could not be at all.

The principle of Aristotle on which the foregoing argument was based, namely, that the velocity of body is inversely proportioned to the density of the medium through which it moves, long maintained its hold on the scientific world. Even as late as the sixteenth century, Cardan was so well persuaded of its truth, that he proposed to determine the relative densities of air and water, by observing the respective velocities with which a body would fall through them. He supposed, for example, that if a body would fall ten times as fast in air as in water; then water is ten times as dense as air. Galileo proposed to try the experiment with a cork; and this put an end to the theory.

Aristotle was sadly perplexed to account for the continued motion of a body, after it had escaped from the moving force. Adopting the maxim, that nothing can act where it is not, he imagined that actual contact is necessary, not only to the production, but also to the propagation, of motion. Hence he could not conceive, why a stone should continue to move after it had departed from the hand by which it was thrown; or why any body should continue its motion longer than it remained in contact with the instrument by which it was moved. This difficulty, which so plainly arose from an ignorance of the law of *inertia*, led him to the strange conclusion, that falling bodies are driven downward by the air rushing in behind and urging them on. The same feeble conceit, he applied to the continued motion of all bodies, which pass through a resisting medium. He supposed that the original impulse or force produced their motion; and that it was kept up by the resisting medium rushing in behind the bodies, and impelling them forward against itself!

If now we pass from the physical speculations of Aristotle down to the age of Kepler, we shall find that the same error

respecting the first law of motion, spread a darkness, deep and dense, over one of the otherwise most brilliant epochs in the history of science. During this period, also, it was universally supposed that, as force is necessary to move a body, so a perpetual supply of force is required to keep it in motion. The whole of Kepler's reasoning is based on this assumption, on this virtual denial of the law of *inertia*. The idea that each planet by virtue of an original impulse, and the law of *inertia*, tended to move in a right line eternally, and with a uniform velocity, constitutes no part of the theory of this splendid astronomer. Hence he had recourse to a certain imaginary quality called *force*, which, he supposed, attended each planet in its course, and impelled it in the direction of its motion. According to this view, if these forces were annihilated, the planets would soon cease to move, and the clock-work of the solar system run down. This error alone, which assumes that force is necessary to the preservation, as well as to the production, of motion, was sufficient to have rendered the efforts of even a thousand Keplers unavailing to solve the stupendous problem of the material universe. So long as this error prevailed in his mind, his genius, lofty and soaring and sublime as it was, must have been baffled and driven back by the insuperable difficulties of the subject. The more ardent his aspirations, indeed, the more strenuous his exertions, the more gigantic his efforts, the more severely must he have felt the manacles and chains that bound him to the earth. And it was only after its deliverance from this error, that the human mind, by the grandest flight it had ever taken, reached the summit of the world; and thence, far above the fogs and mists of the lower atmosphere, surveyed the unutterable glory of the creation.

So far from supposing that the earth, whether resting or moving, is an inert mass of matter, this wonderful man imagined that it is really animated—a huge animal—a prodigious monster—swelling and puffing and blowing, as it finds its way through the infinite depths of space. This was no metaphor with him, but a real belief. 'If any one,' says he, 'who has climbed the peaks of the highest mountains, throw a stone down

the very deep clefts, a sound is heard from them; or if he throw it into one of the mountain lakes, which, beyond doubt, are bottomless, a storm will immediately arise, just as when you thrust a straw into the nose or ear of a ticklish animal, it shakes its head or runs shuddering away. What so like breathing, especially of those fish who draw water into their mouths, and spout it out again, through their gills, as that wonderful tide. For although it is so regulated, according to the course of the moon, that in the preface to my commentaries on Mars, I have mentioned it as probable that the waters are attracted by the moon, as iron is by the loadstone; yet if any one uphold that the earth regulates its breathing according to the motion of the sun and moon, as animals have daily and nightly alternations of sleeping and waking, I shall not think his philosophy unworthy of being listened to; especially if any flexible parts should be discovered in the depths of the earth to supply the functions of lungs or gills.' The imagination of Kepler, by which the earth itself, and all things therein, were animated, was utterly irreconcilable with the idea that matter is wholly *inert*, and therefore equally indifferent to motion or to rest.

The profoundly meditative mind of Galileo, was the first to open on the grand idea of *inertia*, and cause its light to dawn on the world. This sublime conception, however, was slowly formed in the mind of Galileo, and only after many false notions and blunders had preceded it in his imagination. 'Returning to the subject of motion,' says he, 'I was utterly without a fixed principle, from which to deduce the phenomena I had observed; I have hit upon a proposition which seems natural and likely enough.' The principle he thus hit upon this: that the velocity of the falling body increases in the proportion of its distance from the point whence it began to fall. Thus, if at the distance of ten feet, the velocity be as one, then at the distance of twenty feet, it would be as two; and so on, the velocity always being as the distance of the body from the point of departure. A knowledge of the law of *inertia* would have enabled him not only to correct this error, but also to set out from a clear and fixed principle in the determination the other laws of motion, and the explanation of the real phe-

nomena of nature. It would have revealed to him the true relation between the velocity acquired, and the spaces described, by a falling body. He would have seen that if a certain number of feet as a were described in one unit of time, by a falling body, it would pass over $2\ a$ in the next unit of time by virtue of the law of inertia alone, while another space equal to a would be described in consequence of the continued action of gravity. But the velocity generated in two units of time, by the same force, would be only double of that produced in one unit of time. Thus while the velocity would be double, the space would be quadruple; that is, the space would be to the velocity as 4 to 2; it would be, not as the velocity simply, but as the square of the velocity.

It is not known at what time Galileo saw through this error. We only know that in his dialogues on motion, which contain the true theory, this false notion is put into the mouth of Sagredo, on which Salviati remarks: 'Your discourse has so much likelihood in it, that our author himself did not deny to me when I proposed it to him, that he also had been some time in the same mistake. But that which I afterward extremely wondered at was, to see discovered in four plain words, not only the falsity, but the impossibility, of a supposition carrying with it so much of seeming truth, that, although I proposed it to many, I never met with any one but did freely admit it to be so; and yet it is as false and impossible, as that motion is made in an instant; for if the velocities are as the spaces passed, these spaces will be passed in equal times, and consequently all motion must be instantaneous.' It was thus, and not by the aid of the law of *inertia*, that Galileo was delivered from his error, or, at least, that he labored to disprove it.

The 'four plain words,' however, in which Galileo sets forth his conclusion, are not so clear to ordinary apprehension. And his biographer, who attempts to make these four plain words plainer, involves them, if possible, in still greater obscurity. 'The following manner of putting this reasoning,' says he, 'will perhaps make the conclusion clearer. The velocity at any point is measured by the space that would be passed in the next moment of time, if the motion be supposed to continue

the same as at that point. At the beginning of time, when the body is at rest, the motion is none; and, therefore, on this theory, the space passed in the next moment is none; and thus it will be seen, that the body cannot begin to move according to the supposed law.' We will only say, in passing, that this attempt to disprove the possibility of motion from the supposition of the law in question, is directed against the truth. For it is well known, that 'the velocity at any point' is actually measured in precisely the manner specified by the learned author; that is, 'by the space passed in the next moment of time, if the motion be supposed to continue the same as at that point.' Hence, if his argument prove anything, it clearly deduces, from the true law itself, the impossibility of motion in regard to falling bodies.

This reminds one of the world-famous sophism, by which one of the ancients endeavored to disprove the possibility of any motion. If a body move, says he, it must move either in the place where it is, or in the place where it is not. It cannot move in the place where it is not, because it is not there to move; and it cannot move in the place where it is, because while in the place where it is, it stands still. Hence it cannot move at all. Sir William Hamilton says, that this argument has never been answered; and seems to entertain the opinion, that it is one of those puzzles which must forever prove too hard for the human mind. For our part, it seems to us, that if this sophism has never been answered, it is because everybody feels that such things are made to be laughed at, and not refuted. But if, out of respect to the great fame of Sir William Hamilton, we should be disposed to refute it, we might say: True, a body can neither move where it is, nor where it is not; but, then, can it not move from the place where it is, *to* the place where it is not? The sophist was careful to exclude this, *the only real question*, from the terms of his cunningly devised alternative; and thereby made a pitiful show of argument, which is sufficiently refuted by the simple fact of motion.

But to return from this short digression. Galileo first put forth the true doctrine on the subject of *inertia* in 1638, after his mind had been turned from the study of astronomy, by

persecution. 'Conceive a movable body,' says he, 'upon a horizontal plane, and suppose all obstacles to motion to be removed; it is then manifest, from what has been said more at large in another place, that the body's motion will be uniform and perpetual upon the plane, if the plane be indefinitely extended.' This was the first announcement ever made of the great law of *inertia*.

Little could Galileo have seen, however, at that early day, of the wonders it was destined to work in the whole mass of mechanical knowledge. Little did he imagine that the law thus unostentatiously propounded by him was destined to become a constituent element in the true theory of the universe itself. Little did he imagine that it was destined to become an instrument in the hand of a Newton to strike a light from nature, which should utterly overwhelm and confound the persecuting bigots who had driven him from the study of astronomy. Little did he imagine, that by these seemingly humble inquiries of his, he had done more to advance the great cause in which he had so gloriously labored, and so ingloriously suffered, than if his immortal powers had been directly exerted upon the mechanism of the heavens. And little did his persecutors imagine, that the feeble old man, bending beneath the weight of years, retired before the storm only to prepare for them a still more signal defeat and overthrow.

We have now taken a rapid view of the great law of *inertia*, in its relation to the mechanical philosophy of the ancients, as expounded and maintained by Aristotle; which, with all its inherent infirmities, its manifold contradictions and absurdities, prevailed for so many centuries over the human mind. We have also considered it in relation to the epoch, which has been rendered forever illustrious by the labors of a Tycho Brahe, a Kepler, and a Galileo. We shall hereafter witness its still more glorious developments, when we pass from the study of mechanical philosophy to that of physical astronomy. In the meantime, let us endeavor to realize the full import of this great idea, that it may be a lamp to our feet through all the dark places of philosophy.

In order to do this with success, we must learn to distinguish

between the nature of *action* and *motion*, of *force* and *velocity*. These are *the* two elements with which mechanical philosophy has to do; and as they are essentially different in nature and kind, so we must habitually distinguish them in our thoughts, if we would pass through the fair regions of nature with a clear vision and a deep insight. Here they are, then; let us look at them, and see them. The one is an exertion of power; the other exists in that which is wholly destitute of power. Force is an exercise of power; velocity is the effect of force. Power acts, it does not move; body moves, it does not act. Force is necessary to account for the rise of velocity or motion; the absence of all force accounts for the continuance of motion. Body passively yields to force, and moves from place to place Its motion, therefore, is not a *doing;* it is a *suffering*. It merely *suffers* a change of place when it moves. And it is then as perfectly passive when it is in motion, as when it is at rest; and when we speak of 'the *action* of body,' this should be understood as a metaphor, or figure of speech. Otherwise, we shall mistake rhetoric for logic, and become entangled in mere words.

This may seem like a metaphysical nicety which has little to do with mechanical philosophy; but we shall presently see that it is a nicety which cannot be overlooked with impunity. We shall see, that by an inattention to this distinction, the greatest luminaries of science have been eclipsed in regard to the measure of 'the force of moving bodies.' We shall see, that after having labored for more than fifty years to determine such a measure, they finally settled down upon a wrong one, in which the scientific world has now acquiesced for more than a century. We shall see, that the light of this distinction between the nature of *force* and *motion*, (or rather of the great law of *inertia*, of which this light is but one of the rays,) would have conducted them, with perfect clearness, through all the phenomena by which they were so sadly perplexed. They might have given to the theory of motion, even in regard to 'the force of moving bodies,' as it was called, all the precision, clearness, and beauty of a demonstrative science. They might have brought it out from the cloudy region of a

false metaphysics, and presented it to the mind as a radiant and clearly defined principle of truth, without either shade or shadow.

'Descartes had estimated the force of a moving body,' says Dr. Playfair, 'by the quantity of its motion, or by the product of its velocity into its mass. The mathematicians and philosophers who followed him did the same, and the product of these quantities was the measure of force universally adopted. No one, indeed, had ever thought of questioning the conformity of this measure to the phenomena of nature, when, in 1686, Leibnitz announced, in the *Leipsic Journal, the demonstration of a great error committed by Descartes and others, in estimating the force of moving bodies.* In this paper, the author endeavored to show, that the force of a moving body is not proportional to its velocity simply, but to the square of its velocity; and he supported this new doctrine by very plausible reasoning.'[1]

Indeed, the reasoning of Leibnitz was so exceedingly plausible, that it seemed to shake the old theory to its foundation, and gave rise to a controversy which vexed the scientific world for more than half a century. 'The mathematical world,' says the same elegant writer, 'could not look with indifference on a question which seemed to affect the vitals of mechanical science, and soon separated into two parties, in the arrangement of which, however, the effects of national predilection might easily be discovered. Germany, Holland, and Italy declared for the *vis viva;* England stood firm for the old doctrine; and France was divided between the two opinions. No controversy, perhaps, was ever carried on by more illustrious disputants; Maclaurin, Stirling, Desaguliers, Jurin, Clarke, Mairan, were all engaged on the one side, and on the opposite were Bernouilli, Herman, Poleni, Gravesande, Muschenbroek.'

The reasoning of Leibnitz, which is regarded by D'Alembert as sound to a certain extent, is well stated by Playfair in the following passage: 'A body,' he says, 'projected upward against gravity, with a double velocity, ascends to four times the height; with a triple velocity, to nine times the height, and so on; the height ascended to being always as the square

[1] Progress of Mathematical and Physical Science, p. 52.

of the velocity. But the height ascended to is the effect, and is the natural measure of the force, therefore the force of a moving body is as the square of its velocity. Such was the first reasoning of Leibnitz on this subject—simple and apparently conclusive; nor should it be forgotten that, during the long period to which the dispute was lengthened out, and notwithstanding the various shapes which it assumed, the reasonings on his side were nothing more than this original argument, changed in its form, or rendered more complex by the combination of new circumstances, so as to be more bewildering to the imagination, and more difficult either to apprehend or to refute.'

The controversy raged with great warmth, and, considering the nature of the subject, with no little rancor. In 1743, it was supposed to have been finally settled. 'It was now,' says Dr. Playfair, referring to this period, 'drawing to a conclusion, and in effect may be said to have been terminated by the publication of D'Alembert's *Dynamique* in 1743.' Dugald Stewart also, in his *Account of the Life and Writings of Dr. Reid*, has assigned to D'Alembert the honor of having brought this celebrated controversy to a conclusion, by means of a solution in which the scientific world has acquiesced. Such is, indeed, the general opinion; and we are told that the doctrine of Leibnitz, 'under certain conditions, is to be considered as a matter completely established.' The conclusions supposed to be so firmly established by D'Alembert, have even found their way into our elementary works on mechanical philosophy. It may seem presumptuous, then, for any one to agitate this point again, or to call in question the celebrated solution of D'Alembert. We certainly should not do so, if we did not believe that we have found the means of clearly demonstrating the fallacy of that solution, and also of giving the true solution in its stead.

In the opinion of D'Alembert, and those who have followed him, the reasoning of Leibnitz merely shows that the 'square of the velocity' is one of the measures of 'the force of a moving body.' His view of this subject may be more fully presented in the words of Playfair. If the force of a moving body 'be

employed in putting in motion another body, which is itself free to move, no doubt remains that the force is as the velocity multiplied into the quantity of matter. So also, if the force of the moving body is to be opposed by a resistance like that of gravity, the length of time that the motion may continue is one of its measurable effects, and that effect is, like the former, proportional to the velocity. There is a third effect to be considered, and one which always occurs in such an experiment as the last—the height to which the moving body will ascend. This limitation gives to the force a definite character, and it is now measured by the square of the velocity.' From these facts and statements, the author concludes that we have 'two results, or two values of the same thing, the force of a moving body, which are quite different from one another.' Such is the conclusion to which the master mind of D'Alembert has conducted, not only Dr. Playfair, but the great majority of scientific men.

In opposing the solution of D'Alembert, now so generally received, we shall endeavor to show with the utmost mathematical clearness and precision, that the doctrine of Leibnitz is not true under any circumstances, or within any limits; that it has merely the shadow, and not the substance, of a foundation in the nature of things. We shall endeavor to restore the old theory of motion to its original simplicity and beauty, as well as to invest it with a new lustre, by causing it to explain the very phenomena which have been supposed to limit and control its universality. This may be most effectually accomplished, first, by exposing the errors on which the commonly received solution is founded; and, secondly, by *demonstrating* the solution to be substituted in its place.

D'Alembert sets out with the declaration, that the dispute in question has been merely about words; and since his time this declaration has been frequently repeated. Voltaire, in a *Memoire* presented to the Academy of Science in 1741, was the first to set the fashion of asserting that the dispute under consideration was exclusively about words. He has since been followed, in this view of the subject, by those who were vastly superior to himself in mathematics and philosophy. Even

D'Alembert has adopted the conclusion of the wit and poet; and by incorporating it into his celebrated *Dynamique*, has rendered it part and parcel of the commonly received doctrine.

Those who maintain this opinion, however, have not been able to do so without falling into the most manifest confusion and self-contradiction. Playfair (to select a conspicuous example from among many) may be mentioned as a striking illustration of the truth of this remark. 'It was therefore evident,' says he, 'that however much their language and words were opposed, *their ideas or opinions exactly agreed.* In reality, the two parties were not at issue on the question; their positions, though seemingly opposite, were not contrary to one another; and after debating for nearly thirty years, they found out this to be the truth. That the first men in the scientific world should have disputed so long with one another, without discovering that their opposition was only in words, and that this should have happened, not in any of the obscure and tor tuous tracts through which the human mind must grope its way in anxiety and doubt, but in one of the clearest and straightest roads, where it used to be guided by the light of demonstration, is one of the most singular facts in the history of human knowledge.'[2] It is an equally singular fact, it seems to us, that a writer so generally careful and exact as the author of the *Dissertation on the Mathematical and Physical Sciences*, should with so much confidence and amazement, express the above decision as his deliberate opinion; and yet that he should, in the course of a few pages, declare with equal emphasis, that 'it is not an accurate account of the controversy to say that it was about words merely.'[3]

The advocates of the above view of the subject contradict themselves, not only by their own express declarations, but also by the conclusions at which they arrive. It was contended by one side, that the force of a moving body is measured by its velocity simply; and by the other, that this same force is measured by the square of the velocity. Surely, these two measures of one and the same thing cannot be so widely different, and

[2] Dissertation, Part II. Sec. 2, p. 54. [3] Ibid. p. 59.

yet both be equally correct. It is not possible for the human mind to maintain so glaring an absurdity. Both propositions cannot be regarded as universally true, and if we suppose that each is true, only within certain limits, or under certain circumstances, then the great error of both sides consisted in setting up a partial truth for a universal maxim in philosophy. Each party, by too hastily deducing a universal proposition from a few particulars, and by struggling to establish this in the face of opposing facts, would be guilty of a great error, and of a great offence against the true method of philosophizing. It certainly cannot be true, then, that both parties in their ideas or opinions 'exactly agreed,' and yet that, at the same time, each endeavored to establish a universal proposition to the entire exclusion of that maintained by the other. Yet, contradictory as these positions are, they are both maintained by D'Alembert, Playfair, and their followers. As if guided by the authority of D'Alembert, Dr. Playfair has pronounced the whole dispute about words merely; and yet, after he had considered the matter for himself, he declared that this was 'not an accurate account of the controversy.' For he too clearly saw, and has expressly asserted, that the error of each side '*lay in ascribing generality to propositions that are true only in particular cases.*' It surely cannot be necessary to dwell longer on an opinion which has been so amply refuted by the abettors of it; and, indeed, we should not have deemed it worth while to notice it at all, if it had not found its way into almost every work on mechanical philosophy which has appeared since the *Dynamique* of D'Alembert.

The solution of the French philosopher does not appear perfectly satisfactory. On the contrary, it seems attended with several insuperable difficulties. In the first place, it presents 'two measures of the same thing—the force of a moving body—which are quite different from one another.' Now, how can this be? How is it possible that one and the same thing can be measured sometimes by one quantity, and sometimes by another and a widely different quantity?

Secondly. Let us suppose that two equal bodies, S and D, are projected vertically upward; the one with a single velocity,

and the other with a double velocity. Now, it is conceded on all sides, that the force which gives the double velocity to D, is just double of that which imparts the single velocity to S. Yet, because D will ascend four times as high as S, it is concluded that it moves with four times the force. Hence, we are required to believe not only that force is the cause of force, but, also, that a double cause produces a quadruple effect!

Thirdly. This celebrated solution measures the cause by its effect; and, at the same time, denies that the effect is proportional to its cause. But is it not absurd to estimate causes in this way, if they be not proportional to their effects?

Fourthly. It is universally conceded, that if, in the case above supposed, D were met at the outset by a double projecting force, acting downward, in direct opposition to the equal double impulsive force acting upward, then the body would not move at all. It would be simply held *in equilibrio* by the two opposite and equal forces. And yet we are required to believe that it would have moved with a quadruple force, if it had not been checked, and its whole motion destroyed, by a double force!

Fifthly. If one of the effects of a moving body be simply as its velocity, and another as the square of its velocity, it will necessarily follow, that the effect is not always proportional to its cause. And if the maxim, that an effect is proportional to its cause, be unfounded, then all reasoning from effect to cause is at an end, and the foundation of all knowledge is insecure. We could not even reason from the grandeur and magnificence of the creation to the glory of the great Creator. D'Alembert, who was an atheist, did not fail to perceive this consequence of his doctrine; and has, in express terms, called in question the fundamental law of belief respecting the proportionality of causes and their effects. 'Cette diversité d'effets,' says he, 'provenant tous d'une même cause, peut servir, pour le dire en passant, à faire voir le peu de justesse et de précision de l'axiom pretendu, si souvent mis en usage, sur la proportionalité des causes à leurs effets.' It is very remarkable, that neither Dr. Playfair, nor Mr. Whewell, nor other Christian writers, seem to have been aware of the bearing of the speculations of D'Alem-

bert on the above great maxim of philosophy, as well as on the fundamentals of all religion. On the contrary, they reproduce these speculations as if they were perfectly innocuous and harmless, instead of being, as they are, infected with the virus of the rankest atheism in religion, as well as the most deadly scepticism in philosophy.

The errors above noticed lie comparatively on the surface of D'Alembert's opinion. This opinion is involved in a still deeper error, in a still more radical defect; one which vitiates, not only the commonly received solution of the problem in question, but also other very important portions of the dynamical speculation of the present day. The fallacy here referred to, consists in a virtual denial of the great fundamental law of *inertia*, and the assertion of the inherent power and activity of body.

Galileo is not the only great philosopher who, since the time of Kepler, has involved his mind in a cloud of sophistical reasoning, by closing his eyes on the light of the law of *inertia*. It is one thing to strike out a great principle in philosophy, and quite another to follow out this principle to all its consequences, so as to remove everything from the whole mass of human knowledge that is inconsistent with it. The first has been frequently accomplished by the efforts ofa single genius; the last is usually the laborious work of ages.

The truth of this remark is seen in regard to the law of *inertia*. The glory of no period in the history of a science ever equalled that of the age of Leibnitz and Newton. Yet was the transcendent glory of that epoch obscured by false theories and enigmatical views, erected on an assumption diametrically opposed to the great law of *inertia*. By overlooking this law, that age found itself involved in a controversy from which it could not extricate itself; and from which, as we shall see, the succeeding age escaped only by placing it upon a wrong foundation.

Both sides of the great controversy overlooked the law of *inertia* in their speculations. It was assumed by one party, and conceded by the other, that the space passed over by the moving body is the effect of some force, and is therefore the

proper measure of that force. This vague notion of the relation between cause and effect was a source of infinite perplexity and confusion. In reality, the space passed over by a moving body is the effect of no force whatever. The only effect in such a case is the change from a state of rest to a state of motion; and this change once produced, this velocity once generated, the body will continue to move by virtue of the law of *inertia;* and if there were no retarding force, it would move on in a right line forever. The space passed over arises from the law of *inertia*—the inability of the body to stop itself. The space described is the effect of no cause; or, in other words, is no effect at all. *It were surely absurd to admit that it requires a cause to prevent a body once set in motion from passing over space, and yet demand a cause to make it pass over space.* Its velocity being generated, the law of *inertia*, or the perfect passivity of a body, and the entire absence of all cause or force, is all that is required to account for the space described.

The space described by a moving body is the measure of no force, unless we take into consideration the time during which it is described. For, if we leave out the consideration of time, the slowest motion may, in consequence of the law of *inertia*, carry the body over the greatest conceivable space. The only thing necessary to such a result is the allowance of sufficient time. But when the *force* of an ascending body, as it is called, is measured by the height to which it rises, the time is not at all considered. For, although a double initial velocity will carry a body four times as high as a single initial velocity, yet will it require twice as long for it to do so; a most important circumstance, and one which is uniformly overlooked by the advocates of the *vis viva*. If we should estimate the relative forces of two moving bodies, by comparing the space one would describe in one second of time, with the space the other would pass over in ten seconds of time, every one would see the absurdity of the proceeding, and cry out against such an utter oblivion of the law of *inertia*. But great as such an error is, it is precisely that which, as we shall most clearly see, lies wrapped up and concealed in all the reasoning in favor of the *vis viva*.

Even Maclaurin, while treating of this very controversy, in a paper which obtained the prize of the Academy of Sciences at Paris, in 1724, habitually speaks of the space described as the effect of the force to be measured. Hence, although his assault on the reasoning of Leibnitz is to be ranked among the great efforts of the human mind, yet his victory was neither complete nor satisfactory. In point of fact, the logic of Leibnitz, so far from having been exploded by him, succeeded, after a conflict of fifty years, in finding a 'local habitation and a name' in the domain of science.

Indeed, the very question proposed, and so strenuously discussed, betrays an inattention to the doctrine of *inertia*. Each party endeavored to find a measure for 'the force of a moving body.' No one, it seems, during the whole of this protracted controversy, ever stopped to inquire whether there is any such thing as the force of a moving body. No one seems to have asked himself whether the motion of the moving body may not be something different in its nature from the force by which it is produced. If, then, it should, after all, turn out that there is no such thing as that of which both parties sought the measure, it will not be at all surprising that their disagreement should have been so obstinate, and their dispute so protracted. For it must be a most difficult task to bring even the greatest philosophers to an agreement, respecting the measure of a mere metaphysical nonentity, which owes its dimensions to the density of the fog through which it is viewed, and its proportions to the plastic power of the imagination.

'One of the effects,' says Playfair, 'produced by the action of the moving body,' is the height to which it will ascend against the action of gravity. This height, says he, it is well known, is proportioned to the square of the velocity, and hence, if we consider this effect, we are bound to conclude that the force of the moving body is, in this instance, proportional to the square of the velocity. Such is the argument which has been used from the time of Leibnitz down to the present day. Mark the words: *the effect produced by the action of the moving body!* In reality, the motion of the body, and its passage over space, are one and the same thing; and hence, to say that the

motion of the body is the cause, and the space passed over is the effect, is to say that a thing is the cause of itself! It is to say, that a body passing over space is the cause of its passing over space. Such is the naked sophism to which the argument of D'Alembert and Playfair is reduced, when stripped of the ambiguities of language, and the illusion of the senses.

In truth, the dynamical philosopher has to deal with only two things, namely, the force by which motion is produced, and the motion which is produced by the force. The one is the cause, and the other is the effect. We have no need of any third thing. We consider the force that produces motion, and the motion produced; but as to 'the force of the moving body,' as it is called, we know nothing, and we desire to know nothing. We lay it aside as a mere figment of the brain, as a mere dream of the imagination. We shall demonstrate the true theory of motion without its aid. The force which acts upon the body to put it in motion, and the motion of the body, are all the elements of which we have any need. These alone, we believe, will explain all the phenomena, and cause them to appear in a light so clear and simple, that their true nature and significancy cannot be mistaken.

By discarding that metaphysical nonentity, 'the force of a moving body,' and relying solely upon the two elements of *force* and *motion*, the one considered as cause and the other as effect, and always refusing to call force *motion*, or motion *force*, we hope to produce a demonstration of the true doctrine, so clear and so incontrovertible, that the natural philosopher will be led to reverse his former verdict, and to place the *vis viva* of Leibnitz in the same category with his 'living monads,' and his 'pre-established harmony.'

The object of this discussion, as we have already intimated, is to demonstrate the connection and dependency of the phenomena relied on by Leibnitz, with the simple laws of motion as laid down by Newton. Or, in other words, to explode the doctrine of the *vis viva*, and restore the old theory of motion to its original simplicity and beauty.

During the whole of the controversy in question, both sides referred the phenomena of moving bodies, when projected ver-

tically upward, to the action of one force alone, which they called, as we have seen, 'the force of the moving body.' This seems most truly wonderful, for it is clearly not the case. Indeed, this vague, confused notion of 'the force of a moving body,' seems to have misled the power of the mathematics from its true point of application to the question, and thereby rendered a very simple matter exceedingly obscure and difficult. When a body is projected upward against gravity by a certain percussive or impulsive force, this force is one cause. But while the body, set in motion by the projectile force, moves vertically upward, it is continually drawn downward by the force of gravity. This force of gravity is another cause. These two forces are the only causes in the case, and they are amply sufficient to account for the phenomena so confidently relied on by Leibnitz and his followers. Not with 'the force of a moving body,' nor with any other single force, whether real or imaginary, shall we endeavor to explain the facts on which the commonly received notion of the *vis viva* is founded. We shall simply take the two well-known forces, the force of gravity and the projectile force, and show that the phenomena adduced by Leibnitz to overthrow the doctrine of Newton, are, in reality, the necessary consequences of that doctrine.

To render the subject perfectly clear, and leave no obscurity in the path behind us, let us begin with a particular instance. Let us suppose, that a body is projected perpendicularly upward with an initial velocity of one hundred and fifty Paris feet per second; and that another body, exactly equal to the first, is projected upward with a double force. This, according to the doctrine of Newton, will give it a double velocity; that is, a velocity of three hundred Paris feet per second. The first body will ascend three hundred and seventy-five feet before it begins to fall; and the second will reach the height of one thousand five hundred feet. This distance is just four times the height ascended to by the first body; that is, $375 \times 4 = 1500$. Now, from this fact, Leibnitz concludes that the force of the second moving body is four times the force of the first. This inference, we say, is badly drawn, and its fallacy may be clearly shown.

If the force which imparted an initial velocity of one hundred and fifty Paris feet to the first body, had acted alone, the body would have passed over one hundred and fifty feet the first second. But the force did not act alone; the velocity it imparted is counteracted by the force of gravity, which continually pulls the body downward. But the effect produced by gravity on any body at rest is well known; it will cause the body to fall fifteen Paris feet in one second of time. Hence, while the velocity generated by one force would have carried the body up one hundred and fifty feet, that generated by the other force draws it down fifteen feet; and, consequently, instead of ascending one hundred and fifty feet the first second, the body actually ascends 150 — 15, or one hundred and thirty-five feet. In two seconds, gravity causes a body to fall sixty feet; this taken from three hundred, the height to which the body in question would have ascended if gravity had not acted, leaves 300 — 60, or two hundred and forty, for the actual height reached by the body under the joint influence of the two forces. By continuing the same process, we find that the body will, at the end of the third second, be 450 — 135, or three hundred and fifteen feet high; at the end of the fourth, 600 — 240, or three hundred and sixty feet high; and at the end of the fifth, 750 — 375, or three hundred and seventy-five feet high. Here, all its motion upward will be exhausted, and it will begin to descend.

Now, let us mark the result. The body was projected upward against gravity with an initial velocity of one hundred and fifty feet per second. If gravity had not acted, this velocity would have carried the body over the distance of seven hundred and fifty feet in five seconds. But gravity continued to act, and constantly retarded the velocity generated by the projectile force. Hence, instead of ascending seven hundred and fifty feet, the body only reaches the height of three hundred and seventy-five feet, and then begins so descend. But a body having a uniform velocity of seventy-five feet per second, will pass over three hundred and seventy-five feet in five seconds. The actual motion of the body, then, is exactly equivalent to a uniform velocity of seventy-five feet per second for five seconds.

Let us now consider the second body. This is projected upward with a double force, and consequently receives a double initial velocity; that is, a velocity of three hundred feet per second. By repeating the process applied to the first case, we may easily ascertain, that the body now under consideration will continue to ascend for ten seconds only, and will reach the height of one thousand five hundred feet before it begins to fall. This height is equal to the space described by a uniform motion of one hundred and fifty feet per second continued for the same time, or ten seconds. All the actually upward motion in this case, then, is exactly equivalent to a uniform motion of one hundred and fifty feet per second continued for ten seconds; that is, for the time during which the body continues to ascend.

It is easy to compare these results. In the first case, the body is projected upward by a certain force, which imparts to it an initial velocity of one hundred and fifty feet per second. It ascends for five seconds, and reaches the height of three hundred and seventy-five feet. This is equivalent to a *uniform motion*, as we have seen, of seventy-five feet per second, continued for five seconds. In the second case, an equal body is projected upward by a double force, and consequently, according to the doctrine of Newton, receives a double velocity; that is, a velocity of three hundred feet per second. It ascends for ten seconds, and reaches the height of one thousand five hundred feet. This is equal to the space passed over by a uniform motion of one hundred and fifty feet per second, continued for ten seconds. Hence, the mean velocity in the second case is double the mean velocity in the first case; it continues for double the time, and it describes four times the space. Now, is it very wonderful, that a double velocity continued for a double time, should describe a quadruple space? It is certainly the natural and necesssary result of the very law laid down by Newton, and it is in perfect accordance with the equation of uniform motion which has been universally adopted, from his time down to the present day. This great seeming exception to his doctrine, then, is in reality a strong confirmation of it.

In like manner, it may be clearly shown, that a body projected vertically upward against gravity by a triple force, and

with a triple velocity, will ascend to nine times the height; because it will proceed with three times the velocity for three times the number of seconds; and if projected upward with four times the velocity, it will ascend to sixteen times the height; because it will proceed with four times the velocity, for four times the number of seconds. Hence, the facts adduced by Leibnitz to overthrow the doctrine of Newton and Descartes, are the necessary results of that doctrine; and that doctrine furnishes the only rational and satisfactory explanation of them. They do not prove that the *force* is proportional to 'the square of the velocity,' they only prove the old doctrine, that the space is proportional to the velocity into the time. That is to say, the grand enigma of Leibnitz, when closely analyzed and searched to the bottom, simply amounts to this, that a double velocity, continued for a double time, will describe four times the space! Is it not wonderful, that this enigma should have entrapped such minds as those of Leibnitz, Bernouilli, D'Alembert, and Playfair; or that it should so long have resisted the assaults of such adversaries as Maclaurin, Clarke, Jurin, and Mairan?

Let us turn this matter in another light. Suppose the action of gravity to be suspended; and if we must speak of the 'force of a moving body,' let us consider this force as it acts alone. One body say, moves with a velocity of one hundred and fifty Paris feet per second; and the other with a velocity of three hundred feet. Now, if we would compare these two forces, we must consider the spaces they would describe, *in the same time.* In five seconds, the one will pass over seven hundred and fifty, and the other one thousand five hundred, feet. Hence, the one is just double of the other, according to the only fair way of estimating them. But if we suppose the last to move ten seconds, with its velocity of three hundred feet per second, it is clear that it will pass over three thousand feet, or four times the space described by the first in five seconds. Now, would it not be ridiculously absurd to compare these spaces—the space described by the single velocity in five seconds, and the space described by the double velocity in ten seconds; in order to estimate the ratio of the two forces? Most assuredly it would.

And yet this absurdity, glaring as it is when laid open, is precisely that with which D'Alembert and Playfair are chargeable.

This subject may be viewed in still another light. The force of gravity, we know, is considered as a constant force, in all cases of falling bodies near the surface of the earth; and it was so regarded in the controversy under consideration. To view this question still more closely, then, let us suppose a centre of attraction, which exerts an equal force at every point around it. Let us also suppose, that this equal, constant force will cause a body, at any distance from it, to fall toward it fifteen Paris feet in one second of time. A body, then, beginning to fall just fifteen feet from the centre of attraction, would reach it in exactly one second. Another, starting from rest at the distance of sixty feet, would reach it in exactly two seconds. For the attractive force would make it describe fifteen feet in one second, and then, if this force were suspended, it would pass over thirty feet the next second, by virtue of the law of *inertia* alone. But the attractive force acts during this last second also, and makes the body describe fifteen feet more; and the whole space passed over in two seconds is 15+30+15, or sixty feet. Now, *ex hypothesi*, the force exerted in the one case is just double of that exerted in the other; while the one space is quadruple of the other. Hence, it is clear that the spaces described by the two falling bodies cannot be taken as the measures of the respective forces, and that, if we do so, we overlook the law of *inertia*, or sink it in oblivion.

But, after each of the two bodies has reached the centre in question, it will begin to ascend, or, in other words, it will begin to pass away from the centre. The one, or that which has fallen through fifteen feet, and acquired a single velocity, will pass fifteen feet beyond the centre before it begins to return, or fall again. The other will rise, or pass beyond the centre, to the distance of sixty feet. Shall we adopt these spaces, then, as the measures of the forces of the two moving bodies? If so, we shall be compelled to pronounce the one four times as great as the other; but this would be manifestly inconsistent with the hypothesis. For, by the hypothesis, one has been generated by a constant force acting for one second, the other

by the same force acting for two seconds; and consequently the last is just double of the first. Again, the one has been extinguished by a constant force acting for one second, the other by the same force acting for two seconds; and therefore the one is just half of the other.

In this connection, let us call the reader's attention to a very remarkable passage in the work of Dr. Playfair. 'When a moving body is opposed by pressure, by a *vis mortua*, or a resistance like that of gravity, the quantity of such resistance required to extinguish the motion, and reduce the body to rest, must serve to measure the force of that body. It is a force which, by repeated impulses, has annihilated another, and these impulses, when properly collected into one sum, must evidently be equal to the force which they have extinguished. *It happens, however, that there are two ways of computing the amount of these retarding forces, which lead to different results, both of them just, and neither of them to be assumed to the exclusion of the other.*' What! two ways of computing the amount of the same quantities, which lead to different results! Surely, if arithmetic be a true science, both ways cannot be right. The author tells us that both ways are just, and neither of them should exclude the other; but if so, we must, even in mathematics, walk by faith, and not by sight or reason. But let us see these two ways. 'Suppose a body, the force of which is to be measured, to be projected perpendicularly upward with any velocity, then, if we would compute the quantity of the force of gravity which is employed in reducing it to rest, we may either inquire into the retardation which that force produces during a given time, or while the body is moving over a given space. In other words, we may either inquire how long the motion will continue, or how far it will carry the body before it be entirely exhausted. If the length of the time that the uniform resistance must act before it reduce the body to rest be taken for the effect, and consequently for the measure of the force of the body, that force must be proportional to the velocity; for to this the time is confessedly proportional. If, on the other hand, the length of the line which the body describes, while subjected to this uniform resistance, be taken for the

effect, and the measure of the force, the force must be as the square of the velocity, because to that quantity the line in question is known to be proportional. . . . Here, therefore, are two results, or two values of the same thing—the force of a moving body—which are quite different from one another.'

Now, the one of these ways, we contend, is true, and the other false. We should measure 'the force of the moving body,' as it is called, by the time it will take gravity to extinguish its motion upward. For, it is well known, that the force exerted by gravity is proportional to the time during which it acts. Hence, as the initial velocity of three hundred feet in the case supposed is overcome, or neutralized, by gravity in ten seconds, while half that velocity is overcome in half that time, it follows that it moves with the double of the force of the body setting out with half its velocity. The motion of the moving body, or the force of the moving body, (call it what you please,) which is generated by a double force, and destroyed by a double force, must itself be double. Hence, the force of three hundred feet per second, must be double of one hundred and fifty feet per second; for it is confessedly generated by a double force, and it is extinguished in a double time by the action of gravity. And surely, if anything be plain, gravity exerts twice the force in ten seconds that it does in five.

This is the only true way of estimating the amount of the impulses exerted by gravity. The other way is false. Gravity exerts the same force on a body, whether that body move slower or faster; and hence, the space passed over by the body while it is exerted, has no fixed relation to its amount, and cannot serve as its measure. Whether a body move one foot, or ten, per second, the force of gravity exerted on it is the same; and, therefore, the space passed by the body while gravity acts upon it, has nothing to do with the amount of gravity exerted. Such a measure of the force of gravity is most unsound, and, if carried out, would lead to the wildest and most absurd conclusions.

But let us suppose, for the sake of argument, that the impulses of gravity are properly summed up, and measured by means of the space which the ascending body describes, while

they are exerted. It will then follow, that gravity exerts four times the force in two seconds that it does in one, or in ten seconds that it does in five. For the body which ascends fifteen hundred feet, is overcome by gravity in ten seconds, while that which rises three hundred and seventy-five, begins to return in five seconds. If these spaces are to be adopted as the measure of the force of gravity exerted during those times, then gravity exerts four times as much force in ten seconds as it does in five. But this is utterly inconsistent with the fact, that gravity is a constant force, and always exerts the same influence in the same time.

That the sum of the impulses, by which the motion of a body is destroyed, cannot be measured by the space which it describes while the impulses are exerted, may be shown by a very simple and conclusive illustration. If a body be acted on by diametrically opposite forces at the same time, it is well known it will not move at all. For example, if each of the two forces would produce a velocity of one hundred and fifty feet per second, the body would remain at rest. Now, let us suppose that the whole of one of these opposite forces is made to act on the body at once, and only half of the other equal force. The body will then begin to move with a velocity of seventy-five feet per second; and if, at the end of one second, the other half of the force act in direct opposition to its motion, the body will be instantly reduced to a state of rest, and it will pass over only seventy-five feet in all. But, suppose again that this force, instead of being divided into two, is divided into five equal parts, or impulses; and that these are successively applied to the body at the beginning of the first, second, third, fourth, and fifth seconds of its motion. In this case, the sum of the impulses is precisely the same as in the last instance; and yet, the body, instead of passing over only seventy-five feet, actually describes three hundred feet. The reason of this difference is, that the law of *inertia*, which is overlooked by the advocates of the *vis viva*, has had a longer time to operate in the one case than in the other. The sum of the counteracting impulses is the same in both cases, but as this sum is divided into a greater number of equal parts, and spread over a greater number of

equal intervals of time, in the one case than in the other, so the body in the one case is allowed, by virtue of the law of inertia, to pass over a greater space. And, supposing the intervals of time, at which the equal impulses are applied, to be equal, the space described will be longer or shorter, as the number of impulses into which the force may be divided is greater or less. All this is perfectly applicable to the effect of gravity, which may be conceived to be divided into infinitely small impulses, and each one applied at equal intervals of time. Hence, the space cannot be the measure of the sum of these impulses; for the very same sum admits, as we have seen, of a greater or less space, as its equal portions are spread over a greater or less period of time. For the same reason, if the sums were not equal, but one was just double of the other, the one that is spread over the greatest time will allow the body to describe a proportionally greater space. Hence it is, that although the sum of those impulses of gravity, by which the velocity of three hundred feet is destroyed, is just double of that by which the velocity of one hundred and fifty feet is extinguished; yet the first describes a quadruple space while the double sum is exhausted. If the two sums acted upon their respective bodies at once, or if both were exhausted in the same time, they would bring both bodies to a state of rest at the same time; but the equal portions of the double sum are distributed over a double time; and therefore, *in consequence of the law of inertia*, the double velocity describes a quadruple space.

If necessary, we might, by various other illustrations, show the fallacy involved in the *vis viva*. But we forbear, lest the discussion should become tiresome. In conclusion, we shall notice a few of the blunders in practice which have sprung from the foregoing error in theory.

Though Descartes adopted the mass into the velocity as the measure of the 'force of a moving body,' yet, when that force is made to act in direct opposition to gravity, he measured it by the mass into the height to which the body ascends. He did not perceive the incompatibility of these two measures. Hence, the Cartesians gave Leibnitz and his followers a great

advantage over them. In his first paper, Leibnitz availed himself of the unsound portion of the Cartesian theory, with irresistible effect. It is conceded by the Cartesians, said he, that the same force which projects a four-ounce weight one foot high against gravity, will throw a one-ounce weight four feet in the same direction. And this was conceded by them, though the admission is at war with the true portion of their theory.

This may be easily shown. If, with Descartes, we measure the projectile force by the mass into the velocity, then the same force will impart four times as great a velocity to one ounce as it will to four ounces. But this quadruple velocity, if in a vertical direction, will carry the one body sixteen times as high as the single velocity will carry the other. Such is the true consequence of the Newtonian and Cartesian doctrine; and it is a great pity that M. L'Abbe De Conté, and others, who undertook to defend that doctrine, did not see this to be the case. Instead of admitting, as they did, that the force which projects four ounces to the height of one foot, will throw one ounce four feet high, they should have concluded, that it would, as the legitimate consequence of their theory, cause the one ounce to ascend sixteen feet.

The common error of measuring the force by the mass into the height, which so long darkened the subject in question, and confounded the disputants on both sides, still holds a place in the science of dynamics. M. Boucharlat, for example, says: 'In this second method of considering the effects of forces, we regard them as proportional to the weight raised, and the height to which it is elevated in a given time; *it being always understood that the effort necessary to overcome the weight, is not supposed to vary with the elevation.* If, for example, two men raise the same weight, in the same time, to the heights of six hundred and two hundred yards respectively, we would, according to this method of estimating the effects of forces, regard the first as possessed of three times the force of the second. Again, if, in the working day, one man can raise a weight of fifty pounds through a height of two hundred yards, and a second a weight of twenty-five pounds through a height of four hundred yards, we should regard the two men, according to

the present hypothesis, as possessed of equal strength, although the absolute strengths of the two might be very different; the strengths of the two individuals are here considered only with reference to the work done. This method of estimating forces was adopted by Descartes.'

From this measure, which is, as we have seen, the unsound part of the Cartesian doctrine; it was easy for M. Boucharlat to demonstrate, as he has done, that the force is equal to the mass into the square of the velocity.

To try the justness of this measure as a practical rule, let us suppose that the strength of one man is just equal to five hundred pounds, while that of another is a little greater. Now, if the first lifts at the five hundred pounds, he can, by the hypothesis, relieve the earth of its pressure, but he cannot raise it from the surface of the ground. According to the measure in question, then, his strength is equal to 500×0, or *nothing*. But as the other can raise the weight, say an inch, his strength will, according to the same measure, be 500×1, or 500. We should conclude, then, from this method of estimating the two forces, that the one is to the other as 500 is to nothing; whereas, in reality, they are very nearly equal.

In like manner, if one machine could just raise 4,999 pounds, and another 5,000 pounds, we might, by applying the above method of estimating their forces, prove that one is infinitely more powerful than the other. These are 'glaring instances;' but the same error, to a greater or less extent, runs through all the measures of forces which are made according to the method in question. The truth is, that, in such cases, the natural philosopher aims to measure, not the force exerted by the man or the machine, but the difference between this force and the force of gravity. Is it not wonderful, that a consideration so very obvious should so long have escaped the attention of the mathematician?

Precisely the same oversight is committed in the well-known experiment of the whirling table; the object of which is to demonstrate to the eye, that the centrifugal force generated by a circular motion, is as the square of the velocity. It is attempted to show, by this experiment, that a double circular

velocity will cause four ounces to ascend in the same time that a single circular velocity will raise one ounce.

But in this experiment, the effect is produced, not by the centrifugal force alone, but by the difference between this force pulling the body upward, and the force of gravity drawing it downward. And the experiment will work well, the illusion of the ocular demonstration will be perfect, not when one centrifugal force is quadruple the other, but when the excess of one over gravity is four times the excess of the other. This accounts for the repeated failures of the experiment in question; which the experimenter usually ascribes to some disorder in his machine. The disorder is in his method, in his thoughts; and, with the most perfect whirling table ever constructed, it were easy to raise a six, or an eight, or a ten-ounce weight, by means of the double circular velocity, in the same time that the one-ounce weight is raised by a single velocity.

In conclusion, if we have satisfied the reader that the force of a moving body should never be measured by the square of its velocity, but always by the velocity simply, our time has not been misemployed. For if we are right on this subject, then have we exposed errors which most deeply affect the very vitals of mechanical philosophy, and which, for more than a century and a half, have embroiled the clearest and most important principles of the science. Then have we demolished the *vis viva* of Leibnitz, which has so long disfigured every system of rational mechanics, as well as taxed the brain and exhausted the ingenuity of its cultivators. And we may now, as the result of our labors, repudiate two measures of one and the same thing, widely different from each other, as an impossible and contradictious conceit—as a flagrant violation of the unity, harmony, perfection, and beauty, of scientific truth. We may look through appearances, and behold the very nature of things themselves. We may behold, with undisturbed vision, and with increased delight, that simple but sublime theory of motion, which forms the golden secret of the material universe; beneath whose touch every cloud is dispelled, every enigma solved, every phenomenon explained, and the Divine order of the universal frame—of the whole magnificent panorama of visible things—laid open and rendered apparent to the human eye.

ART V.—1. *An Historical Sketch of the Progress and Present State of Anglo-Saxon Literature in England.* By John Petheram. London.

2. *Bibliothek der Angelsächsischen Poesie in kritisch bearbeiteten Texten und mit Vollständigem Glossar, herausgegeben.* Von C. W. M. Grein. Erster Band. Goettingen.

In the fifth century after Christ, certain dwellers around the shores of the North Sea left their native homes, and, sailing south-westwardly, soon reached the white cliffs of Britain. They were known in their own land by the different designations of Angles, Saxons, Jutes, Frisians, etc., and had grown up into a fierce and cruel courage amid the civil strifes which they waged among themselves by land and by sea. They were the Northmen, delighting in the stormy freedom of their wintry seas, and never happier than when plundering the dwellings of their enemies, and wreaking on them their cruel vengeance. To this natural fierceness was added a wild, fanatic zeal, which sprung from their gloomy Pagan faith, and which specially rejoiced in sating itself on the helpless followers of the religion of Jesus, as well as upon every object either of learning or of art, which the higher civilization of Christianity lends to the adornment of life.

The first few vessels which followed the ominous raven-standard of these savage sea-kings, were soon succeeded by a host of others; so that, in a short time, the native population of Britain were driven from their homes to find shelter among the mountain fastnesses of Wales and Scotland; while the invaders entered, with savage glee, upon the possessions of those whom they had slain or driven into exile. So numerous were these North Sea dwellers, that within a few years they filled up the Southern, Eastern, and Central portions of the island, and became the masters of the soil. During the lapse of two centuries, however,—centuries marked by the display of the most heroic resistance upon the part of the native possessors of the

soil, and by the most cruel and sanguinary retaliation upon the part of the foreign foe,—oneness of interests gradually moulded the originally divergent Germanic tribes into a common likeness, which likeness was confirmed and ennobled by a consolidated nationality and an elevating Christianity, until, in the reign of Egbert, (A. D. 800–836,) the lands over which he ruled received the name of ENGLAND, the Land of the Angles, from the fact that the Angles were the most powerful and civilized of the kingdoms of Britain.

Of the literature which the Germanic tribes brought with them into Britain from their homes around the North Sea, we have but the scantiest fragments. Of their prose literature, nothing remains to us; while of their poetry, we have but a single specimen in that remarkable Epic, *Beówulf*, which is, in lee l, 'the only perfect monument of Anglo-Sax n romance which the hand of time has left us.' Let us first turn our attention to the PROSE LITERATURE, which sprang up on the English soil itself.

Before the time of the venerable Bede, who was born A. D. 672, the only name of note among the Anglo-Saxon writers was Aldhelm, born about A. D. 656. Living in an age when knowledge was a rare and even more than a royal attainment, Aldhelm was justly eminent for his literary acquirements. His biographer, Faricius, with a fond enthusiasm, somewhat exaggerated no doubt, assures us that Aldhelm 'Could write and speak the Greek language like a native of Greece; that he excelled in Latin all scholars since the death of Virgil; and that he was acquainted with Hebrew, and read the Psalms and other parts of Scripture in the original text.' Aldhelm was the honored head of the Abbey of Malmsbury, which was famous then, and in after times, for the piety and learning of its inmates. Here, in the quiet leisure of his retired life, he composed the larger part of his works. Of his Latin compositions, since they do not come within the range of our subject, we say nothing. Aldhelm wrote, however, in the Anglo-Saxon as well as in the Latin tongue; and King Alfred esteemed his works so highly, that he placed him in the first rank of native writers. The ravages of time have left us nothing of his writings in the vernacular tongue.

There is no literary name in Anglo-Saxon history (excepting always that of the good King Alfred) more highly revered than that of Bede, justly called the Venerable. Although many of his works have come down to us through the intervening centuries, we know but little of his personal history. The life of Bede was one prolonged and rigid retirement from the world; so much so, that even his own contemporaries, it is said, knew him only by his works. From his seventh year to the year of his death, he lived in the monastery of Wearmouth, under the instructions of the learned ecclesiastics, Biscop and Ceolfrid. Bede's reputation for learning had reached even to Rome; and it is related upon very good authority, that the pontiff, Sergius I., invited him to that city to confer with the head of the Roman Church on some difficult points of church discipline. The last work on which Bede was engaged, was a translation of the Gospel of St. John into Anglo-Saxon. His disciple, Cuthbert, has left us an interesting account of the closing moments of his life. On the morning of the day on which Bede died, one of his disciples said to him, 'Dearest master, one chapter still remains, and thou canst ill bear questioning.' But, suffering as the good man was, yet remembering how much his countrymen needed the Gospels in the tongue in which they were born, he said, 'Take thy pen and write hastily!' At eventide the chapter was nearly finished; but the increasing weakness of Bede seemed to preclude all hope of his finishing this labor of love, which lay so near his heart. As the waning light of his life glared up for a few moments, preparing to vanish from the earth forever, said the faithful scribe to the dying man, 'Dearest master, only one sentence remains unfinished.' Bede, reviving at the thought of his finished translation, bade him again write. A few words were dictated, when the scribe exclaimed, 'It is done!' 'Thou hast said aright,' answered Bede; 'it *is* done.' And thus, on the floor of his room, feebly chanting the Gloria Patri, he had just strength to proceed to the end of the phrase, and died with the last words, 'Spiritui Sancto,' upon his lips.[1]

Bede composed upwards of forty different works, which may

[1] Wright's Biographia Britannica Literaria: Anglo-Saxon Period.

be conveniently ranged under the heads of Theology, Science, History, and Poetry. The larger part of Bede's writings were theological. They consist of commentaries on the different books of the Bible, 'which exhibit great store of information, as well as acuteness of perception, but are too much characterized by that great blemish of mediæval theology, an extravagant attachment to allegorical interpretation.' The scientific works of Bede are mainly compilations from other writers, and especially from the elder Pliny. Although exceedingly meagre and defective, compared with the magnificent results of modern scientific research, they were, in the estimation of Bede's contemporaries, the mature fruit of the scientific labors of those early centuries. As a historian, the name of Bede stands deservedly high among the national writers of England. His great work was *The Ecclesiastical History of England.* The title of the book indicates its scope. Having made some remarks on the physical features of the country and of its people, Bede rapidly paints the civil and religious condition of the land from the earliest times down to the coming of Augustine, A. D. 597, when the ecclesiastical condition proper of England had its beginning. The occurrences in Kent then occupy the author's attention exclusively, until, in time, Christianity gradually spreading throughout the other kingdoms of the country, he includes their history in his narrative, until he comes down to A. D. 731, where he concludes his interesting work with some general reflections. This history was written in Latin.

From the death of Bede, A. D. 735, to the birth of Alfred, A. D. 848, there was no native writer of any eminence. In the closing years of that century, the scanty vernacular literature of the Anglo-Saxons almost perished in consequence of the repeated inroads of the savage Danes. The fury of these merciless pagans against every work of literature or art, knew no bounds. The noble abbey of Croyland, with its valuable volumes, was fired by the torches of the barbarians, and its peaceful inmates slain while praying at its hallowed altars. From Croyland, these savages hastened to Peterborough, which, with its large collection of books and charters, soon met the fate which had befallen Croyland. The abbey at Ely perished

in the same way. When Alfred ascended the throne of England, in A. D. 870, the whole land was in a most pitiable condition. Burned dwellings, devastated fields, ruined church edifices, the unburied bodies of the slain, the monuments of art, literature, and religion, mutilated, or entirely destroyed, met the eye of the observer everywhere. The brutal hosts of the Danes swarmed over the land, insulting the vanquished by their detestable orgies; while the rightful King of England was a homeless wanderer, concealing himself for safety in the forests and marshes of Somersetshire. So silent was Alfred compelled to be in his movements, so retired in his island retreat, that many of his own people mourned him as dead, and gave themselves up to the despair which daily deepened around them; and when, after months of weary suffering and watchful activity, the King came silently forth from his hiding-place in the Isle of Pines, at the head of a few trusty followers, and struck a sudden and unexpected blow at the unguarded enemy feasting at Etheldune, and there broke the dreaded despotism of the Danes, England rejoiced as if God had suddenly sent his angels to redeem the land from its terrible thraldom. It would be an interesting task to dwell for awhile upon the untiring efforts of King Alfred to settle the national affairs upon a sure and abiding foundation; to note his successful endeavors to build up, by land and by sea, an impregnable rampart against further invasions of the Danes; to speak of his thoughtfully laying the foundations of that mighty English Navy which in after times ruled the seas so imperiously for centuries, as well as of the schools and churches which he erected; but this would lead us too far away from our special theme.

After Alfred had made his people secure, in a measure, from any further inroads of the northern enemy, and had partially readjusted the thoroughly disorganized and almost destroyed foundations of the government, he earnestly turned his attention to the intellectual and moral improvement of his people. The mental condition of the English nation at this time was very much like its material condition; for it was in ruins.

To remedy this sad condition of things, Alfred not only secured the services of such scholars as Grimbald, John of

Corvey, Asser, Plegmund, and others, who instructed the people in their native tongue, but he also became himself an author. By rigidly economizing the time, so imperatively demanded for the wise administration of national affairs, he was enabled to furnish his people with more written instruction than the most learned and laborious scholar in his kingdom. The love of literature, and especially of the old national literature which he had so eagerly imbibed under his mother's teaching, not only never left him amid the most tormenting physical infirmities and the ever-increasing cares of kingly duties, but strengthened and developed with his advancing years. Those heroic old German songs, which set forth in such luminous colors the chivalrous deeds of his ancestors, were his perpetual solace throughout the changing years of his prosperity, as well as of his adversity; and, whether a hunted and starving fugitive among the fens of Somersetshire, or a powerful ruler upon the throne of England, he ever turned to their ennobling themes with the fondest enthusiasm.

Among the translations into the Anglo-Saxon language which Alfred made for the instruction of his people, was that of the remarkable book entitled *De Consolatione Philosophiæ*, by Boëthius; a work held in the highest estimation through all the middle ages. In its pages are reflected the lingering rays of the old classic splendors, softened and beautified by a dawning Christian faith. In the horrid gloom of a dungeon, the Roman Senator consoled himself by reproducing the lessons of ancient wisdom, to which fountain multitudes of the sorrowing, in after times, repaired for consolation. The work speaks of fame, of beauty, of power, and of sensual pleasures; illustrates them by the most eminent examples; exposes their deceitful promises, and then, with a grandeur through which loom up the mighty griefs of the great Roman himself, proves that all true good is found in God alone.

King Alfred did not merely translate the *Consolations;* on the contrary, guided by a rare judgment and a refined taste, he managed his materials with a master tact, abridging, enlarging, omitting, and sometimes adding entirely new matter. Thus, in the second book, where Boëthius asserts that never once,

through all his public life, was he influenced by ambitious motives, Alfred adds this noble and truthful declamation: 'Thät is nu hradhost tô secganne, thät ic wilnode weordhfullice tô libbanne thâ hwile the ic lifede, and äfter mînum life thâm monnum tô läfanne the after me wären min gemynd on godum weorcum.'[2] 'This is now especially to be said, that I wished to live honorably while I did live, and after my life, to leave to the men who should follow me, my memory in good works.'

Another important work translated by King Alfred, was a book written in Latin by a Spanish monk named Orosius, entitled *The Chronicle of the World.* Alfred was specially fond of historical literature, but the pressing destitution of his people was a more powerful incentive with him to literary labors, than his mere personal gratification of a desire for knowledge. Necessity led Alfred to the translation of this work, since no other more reliable history was within his reach. 'Accident first induced Orosius, who was by no means distinguished for learning, to undertake the office of historian. In A. D. 410, he became acquainted with Augustine, ... who, at that time, was occupied in composing his *De Civitate Dei.* Augustine persuaded Orosius to write a historical work, with the view of supporting his own refutation of the charge made by the heathen writers, that Christianity had brought complete ruin upon the Roman world. Orosius complied; and, commencing with the history of the first man, brought down the account of the calamities of all the people of every country to the time of the Goths, Alaric and Athaulf, the scourges of Rome. The object of the work recommended it to the orthodox clergy, who turned with aversion from all the better means of self-instruction.'[3]

As, in translating the *Consolations*, Alfred had altered, rearranged, and added to the text, so also, in the history of Orosius, we find the evidences of independent thinking on the part of the royal translator. In the very beginning of the book, Alfred interpolates a highly interesting geographical sketch of the large tract of land named Germania, as well as two original narratives of voyages made by Ohthere and Wulfstan to South Scandinavia and Truso.

[2] Ch. XVII. (Bohn's Antiquarian Library.) [3] Pauli's Alfred the Great.

Having thus provided, in a measure, for his people historical and geographical knowledge of the pagan kingdoms of the old world, Alfred turned his attention to the history of his native land. There was ready to his hand the invaluable history of his distinguished countryman, Bede, who, as we have already said, had written in Latin the ecclesiastical, and, incidentally, the civil history of Britain. By the translation of this work into the Anglo-Saxon tongue, Alfred gave to his people a knowledge of the ancient inhabitants of England; of the invasion by the Romans; of the persecution of the Christian Church by Diocletian; of the Arian and Pelagian heresies; of the savage civil strifes which deluged the land with fratricidal blood; of Augustine's successful missionary labors in Kent; of the final conversion of the nation from paganism to Christianity, and the ultimate success and enlargement of the Christian Church. It was a truly royal work which the good King thus accomplished; and he soon had the pleasure of seeing the beneficent results of his labors, in the rapid advancement of the nation in civilization, art, literature, and religion.

The reign of Alfred was the Augustan era of Anglo-Saxon literature; and Alfred himself was more than an Augustus in his personal efforts to develop that literature. It was in his reign, and by his munificent assistance, that Bishop Plegmund undertook, and carried on so successfully, the instruction of the clergy. It was in his reign that the distinguished Grimbald was persuaded to relinquish his learned seclusion in the Flemish convent of St. Omer, and repair to England, to assist in organizing a plan to diffuse more widely information among the youth of the land. It was the era, too, of Asser, the King's biographer, who applied all the energies of his well-stored mind to the rendering into the vernacular tongue of the literary treasures locked up in the Greek and Latin languages. In a word, it was the most brilliant era in all Anglo-Saxon history, and the most admirable character in that era was King Alfred himself. In the enthusiastic, but truthful, words of Dr. Pauli, 'No king nor hero of antiquity or modern times, can be compared with Alfred for so many distinguished qualities, and each so excellent. Princes more renowned for power and

glory, and reigning over greater nations, have always had some defect in their moral character, which forcibly contrasts with our high estimation of their mental qualities; and, although by the side of Alfred, ruling in his narrow Wessex, their forms appear to tower up high amongst the stars, yet his figure, in its smaller proportions, remains one of the most perfect ever held up by the hand of God as a mirror to the world and its rulers.'[4]

During the century and a half which intervened between the death of England's most revered King, A. D. 906, and the speedy conquest of the kingdom by Duke William of Normandy, A. D. 1066, there occurs but a single name of any importance among the Anglo-Saxon writers, that of Alfric the Grammarian. That century and a half was, in many respects, one of the saddest in Anglo-Saxon history; a period embittered by terrible dissensions in the State, and by unseemly strifes in the Church. The stormy divisions among the people, caused by the selfish ambition of contending aspirants for the throne, gave occasion for the cherishing of renewed hopes on the part of the many Danes who had lived on terms of peace with the English upon English soil, and made them confident in the expectation that, with the assistance of their kindred in their Scandinavian homes, they might easily secure possession of the English throne. Hence the invasion of Anlaf, and the memorable battle of Brunnanburh; hence those terrible expeditions of Justin and Guthmund, from the terrors of which, England's feeble ruler was compelled to purchase exemption by the hard-earned gold of his oppressed subjects; and hence, also, the other repeated conquests of the Danes over the degenerate descendants of the heroic Alfred, until, in London, the recreant Witan, or Parliament, of the Anglo-Saxon people, wearied out by the invasions of the Danes, elected the powerful Canute their King. For more than a third of a century, the Scandinavian sea-kings ruled the English people; and when the rightful heir to the throne, at the termination of that period, assumed the royal privileges of his ancestors, he brought with him but a transient gleam of hope, which soon went out in blood and darkness on the fatal field of Hastings.

[4] Alfred the Great.

The name of Alfric the Grammarian, therefore, shines out the more distinctly among Anglo-Saxon writers, not only from the fact that he was eminent as a scholar and ecclesiastic, but also for the reason that he stood almost alone through the terrible commotions which darkened the last century of Anglo-Saxon national degradation. Alfric was eminent for his industry, his accuracy, and the variety of his literary labors. Among his writings we find a Latin Grammar, a Manual of Astronomy, and a very large collection of Homilies. These homilies Alfric translated from the Latin into the Anglo-Saxon, the design of which, as he himself informs us, was, 'The edification of unlettered people, who, in reading or hearing, could understand only their native tongue; wherefore, he had avoided obscure words, using nothing but simple English, that it might thus reach more easily the hearts of readers or hearers, since they were not learned enough to be taught in another language than that in which they were born.'[5]

The only other work which claims a notice under this branch of our subject, is *The Anglo-Saxon Chronicle*, mere memoranda, yet of considerable value, as they contain brief accounts of some of the most important events in English history, from the earliest period down to A. D. 1154, a century, nearly, after the Norman Conquest. This *Chronicle* was the production, not of a single writer, but of many, living at widely different times, and, for the most part, eye-witnesses of the transactions which they record. Hence, while the earliest portions of the work are written in Anglo-Saxon of the most primitive form, the latest additions approach somewhat, in the structure and vocabulary, to modern English. Among the eminent writers who either assisted in the composition of the *Chronicle*, or had the supervision of it at different times, there is sufficient evidence to warrant us in naming Plegmund, King Alfred, and Archbishops Dunstan and Alfric. As the Anglo-Saxon language was completely broken up as a distinct idiom, after the terrible subjugation of the country by Duke William, so *The Anglo-Saxon Chronicle* drew to its close with the dying accents of the tongue in which it had been written.

[5] Wright's Biographia.

We pass now to Anglo-Saxon Poetry. The Anglo-Saxon poets occupied themselves almost exclusively upon the subjects of war and religion. Their poetry is the rude and vehement expression of men somewhat below the level of modern culture, either of mind or of heart. We must not expect to find among them, situated as they were, a Tennyson or a Browning, much less a Milton or a Shakspeare. The few poetical compositions which have come down to us from those early centuries, are, indeed, of more value to us as specimens of language than as illustrations of genuine poetic genius.

Anglo-Saxon poetry was very peculiar in its structure, being neither modulated according to foot-measure, like that of the Greeks and Romans, nor written with rhymes, like that of many modern languages. The following are some of its principal characteristics:

1. *Alliteration.*—This results from such an arrangement of the couplets, as that there shall be two or more principal words in the first line beginning with the same letter, which letter must also be the initial of the first word on which the stress of the voice falls in the second line.

2. *Periphrasis.*—Anglo-Saxon poetry abounds in periphrastic expressions. Thus, of the nine following lines from the poet Cädmon, eight are employed to express in various periphrastic forms the name of the Deity:

1. The Guardian of the heavenly kingdom.
2. The Mighty Creator.
3. Glorious Father of his works.
4. Eternal Lord!
5. Holy Creator!
6. The Guardian of mankind.
7. The Eternal Lord.
8. Almighty Ruler!

These repetitions are introduced generally with much abruptness, coming in sometimes like vehement interjections.

3. *Metaphor.*—This figure abounds in their poetry, and especially in Cädmon. Thus, in speaking of the Ark, he styles it a '*sea-house*,'—'*a high mansion*,'—'*a palace of the ocean*,'—'*a wooden fortress*,'—'*the floor of the waves*,' and numberless other things.

4. *Similes.*—Similes are very rare in their poetry. The entire romance of Beówulf, extending through three thousand lines, contains only five; and they are of the simplest kind. Thus, the vessel gliding swiftly over the waves is compared to a 'bird,'—

'Flota fāmigheals *fugle gelīcost;*'
(Canto II., l. 218.)[6]

the monster Grendel's eyes, to 'fire,'—

'——him of ēágum stōd
Lige *gelīcost leóht* unfāger;'
(Canto IV., l. 726.)

his nails to 'steel,'—

'Wǣs stēda nægla gehwylc *stȳle gelīcost;*'
(Canto V., l. 985.)

the light of the Grendel's dwelling under the waters of the lake to the 'candle of the firmament,'—

'Lixte se leóma, leóht inne stōd
Efne swā of heofone hādre scinedh
Rodores candel;'
(Canto VII., l. 1570.)

and the sword which has been bathed in the monster's blood, melts immediately 'like ice,'—

'Thät hit eal gemealt *īse gelīcost.*'
(Canto VII., l. 1608.)

5. *Inversion.*—The Anglo-Saxon prose is remarkably straightforward, and therefore natural and simple in its construction. The poetry, however, is remarkable for its abrupt and disconnected transitions.

6. *Omission of Particles.*—The contrast in this particular between the prose and poetry, is very marked. The prose abounds in particles, while the poetry is almost entirely destitute of them. This lack of particles in their poetry, greatly increases the difficulty of its construction, and enhances its obscurity. Let us take an example: King Alfred, in his prose, writes this sentence: '*So doth the Moon with his pale light,*

[6] Grein's Bibliothek der Angelsächsischen Poesie; Beówulf.

that the bright stars he obscures in the heavens;' which, when cast into the poetic form, reads thus:

> '*With pale light*
> *Bright stars*
> *Moon lesseneth.*'

Hence, all the poetical compositions of the Anglo-Saxons have a very disjointed appearance.

Anglo-Saxon poetry may be ranged under three heads: 1, Ballads; 2, Romances or Narrative Poems; 3, Miscellaneous Poems.

The Ballads must have been held in high esteem among all classes of the people, since they are always referred to with the fondest enthusiasm. The song of *Ethelstan's Victory* at Brunnanburh, and that on the *Death of Edgar*, are favorable specimens of the first class. The epic *Beówulf*, the poem of *Judith*, and those of Cädmon, are the noblest examples of the second class. Of the third class, one of the best remaining to us is the poem entitled *The Exile's Complaint*. Let us consider now two or three poems somewhat in detail, beginning with *Beówulf*. The earliest notice we possess of this remarkable poem, the only perfect monument of Anglo-Saxon historical Romance which the revolutions of a thousand years have left us, we have in the Catalogue of Wanley, published in 1705, where it is designated as '*Tractatus nobilissimus poetice scriptus.*' From the time of Wanley down to Sharon Turner, the poem lay entirely neglected. Mr. Turner, in his very popular *History of the Anglo-Saxons*, made some extracts from the manuscript, accompanied by translations; but it was not until the year 1815, a century after the first notice of it by Wanley, that an edition of the entire poem was published. It is a humiliating fact, too, that the first edition of *Beówulf* was not prepared by an Englishman, but by a foreigner, the learned Icelander Thorkelin, who published the original text with a Latin translation, at Copenhagen. Thorkelin, however, was but imperfectly familiar with the Anglo-Saxon text,—and the manuscript of *Beówulf* demanded for its elucidation a scholar thoroughly versed in the language,—and therefore the text of this first

edition, as well as the translation which accompanied it, was very unsatisfactory.

Mr. John Mitchell Kemble, perhaps the most accomplished and accurate Anglo-Saxon scholar that England has yet produced, published a vastly improved edition of *Beówulf* in 1833; and a translation of the same, accompanied by a valuable Glossary and Philological Notes, in 1837. In 1855, Mr. Benjamin Thorpe, who, in some respects, may be considered the equal of Mr. Kemble, published an excellent edition of the poem, accompanied by a literal translation and a Glossary. In 1849, Prof. Wackerbarth, of the *College of our Lady of Oscott*, England, published an excellent translation of *Beówulf* in the octosyllabic measure, which renders the poem especially attractive to a mere English reader. The following is a brief analysis of this remarkable poem:

The subject of *Beówulf* is the expedition of a prince of that name, who was a lineal descendant of Woden, from West Gothland to Norway, for the purpose of delivering the King of the latter country, whose name was Hrothgar, from the terrible assaults of a monster named Grendel, who had frequently entered the royal halls of Heorot and slain the King's sleeping nobles. These sanguinary visitings of the Grendel had continued during twelve years, when, the fame of them having reached Beówulf's home, he set out with a retinue of fifteen tried followers, and soon reached the royal residence of Hrothgar. After a warm welcome on the part of the King, and much feasting, Beówulf is left to watch the monster's coming, while the other warriors sleep. Soon the Grendel appears. Beówulf grapples with him, and wrenches from him an arm; and thus mutilated, the monster escapes to his den. In honor of this heroic triumph, various festivities are arranged; and at a magnificent banquet, Beówulf and his companions receive costly gifts for their services. Soon after this, in the absence of Beówulf, the Grendel's mother, another monster, enters the palace and carries off an old friend and counsellor of the King, named Æschere; whereupon the King promises Beówulf still greater rewards if he will seek the den of the Grendel and destroy him and his monster-mother. Beówulf goes forth to

the encounter, learns that the dwelling of the Grendel is under the waters of a lake, and plunges down to the conflict, from the fearful labors of which he emerges a victor. Having then received many precious gifts from King Hrothgar, he returns to his own land, and rules his people with eminent justice for many years.

In the course of time, a Dragon begins to devastate the neighborhood, and Beówulf prepares to encounter this third monster. After a terrific contest, he slays the Dragon, but receives himself a fatal wound. He dies; and the poem closes with a description of the erection of the funeral-pyre and the solemn burial rites over the fallen hero,—a hero

> 'Manna mildust and mondhwærust,
> Leódum lidhost and lofgeornost.'
> (Canto XII., l. 3182.)

The question of the historical character of the *Beówulf*, has recently attracted the attention of Anglo-Saxon scholars. There is much in the poem that furnishes ground for the supposition that the characters and events are purely legendary. Some critics maintain that all these events and characters are legendary; and they look upon Beówulf as a Teutonic Hercules, wandering through different lands, and performing wonderful feats of valor, after the fashion of that other Hercules, of whom we read in our boyish days in Greek readers. Other critics have attempted to prove that nearly all the characters and events of the poem are historical. Dr. Haigh, of England, has recently published an interesting work, in which he maintains this theory with great plausibility.[7] The question cannot, from the very nature of the case, be settled to one's entire satisfaction upon either side. That much of the poem is purely legendary, must be evident even to a superficial reader; and that some of its characters are really historical, and that they lived, and reigned, and fought, is highly probable. One thing, however, amid these conflicting opinions, is acknowledged by all, namely, that no poem of the middle ages paints so vividly the daring prowess of the old northern sea-kings, or sets forth so glowingly the songs of the gleeman and the royal banquetings of the olden times.

[7] The Anglo-Saxon Sagas. By Daniel H. Haigh: London. 1861.

From the pagan romances of the Anglo-Saxons, we turn to their religious poems. Cädmon has justly been esteemed the most eminent of the religious poets. So highly were his writings esteemed by his countrymen, that they framed a legend to account for his poetic genius. The venerable Bede tells us in his History,[8] that Cädmon being one evening at a house where there were social festivities, it was agreed, according to the usual custom of such occasions, that, for amusement, all present should sing in turn; and that when the musical instrument was presented to Cädmon, he refused to sing; and at once leaving the company, went out to the stable. Having attended to some menial duties there—for it seems that he was a herdsman—he lay down to rest; and during his sleep a person appeared to him, and, saluting him by name, said, 'Cädmon, sing some song to me.' He answered, 'I cannot sing; for that was the reason why I left the entertainment and retired to this place.' The mysterious stranger replied, 'However, you shall sing.' 'What shall I sing?' rejoined Cädmon. 'Sing the beginning of created things,' said the stranger; and hereupon, (as the legend runs,) he began to sing verses to the praise of God, which he had never heard. Awakening from his sleep, he remembered all he had sung in his dream, and soon added much more, says Bede, to the same effect, in verse worthy of the Deity. Cädmon remained, during his entire subsequent life, an inmate of the famous Abbey of Hilda, devoting himself to deeds of charity, and the composition of poetry. The poetry of Cädmon, as it existed in Bede's time, treated successively of the whole history of Genesis, the departure of the Children of Israel from Egypt, and other portions of the Old Testament; also of the Incarnation, the Passion, the Resurrection, and the Ascension of Christ, together with other poems upon kindred subjects. Cädmon died about A. D. 680, with his praise upon the lips of all men.

In the earlier part of the seventeenth century, Archbishop Usher came into possession of a manuscript of the poems of Cädmon. He presented the valuable treasure to his friend Junius, who issued the first edition of the work at Amsterdam,

[8]Ecclesiastical History, Ch. XXIV. (Bohn's Antiquarian Library.)

in 1655. The manuscript, with the entire collection of that scholar, passed into the keeping of the Bodleian Library at Oxford, where it is still preserved. The best edition of Cädmon that has yet appeared, was prepared under the skilful supervision of Mr. Thorpe, and published by the 'Society of Antiquarians' of London, in 1832. It consists of a text carefully formed from the original manuscript, and a literal English version.

Mr. Bosanquet, of London, who published, a few years ago, a translation in verse of a portion of Cädmon's *Genesis*, states that Milton made his first sketch of *Paradise Lost* in 1665, the same year in which the first edition of Cädmon was published by Junius, and intimates that Milton had seen the poems of Cädmon, and had made free use of them in composing his own great poem. The charge is too preposterous for a serious refutation. The affluent treasures of Milton's magnificent intellect, and the wonderful sweep of his far-reaching imagination, were amply sufficient in themselves to produce and adorn any poetical conceptions possible to a finite mind. Milton could soar with ease to poetic heights, up to which the Saxon Cädmon could scarcely lift his eyes, much less ascend.

The only other poem to which we can refer, is *Judith*. The high-souled courage of this heroine must have specially won the admiration of a people whose greatest delight was in witnessing scenes of daring, and who, above all other nations, revered what was noble in woman. The unknown poet celebrates, in this beautiful fragment, the deliverance of Israel from the mighty army of Nabuchadonosor, under his General, Holofernes. The first eight sections of the poem, and part of the ninth, are lost; and the fragment remaining begins with the description of the feast. Judith's heroic bearing during the drunken revelry; the beastly abasement of the pagan General; the daring deed of the heroine, as she smites with the sword of vengeance the leader, in the midst of two hundred thousand enemies; her perilous journey in the night from the tent where the headless body of Holofernes lies, to the gates of her own city, carrying with her, as a trophy, the severed head of the 'heathen hound;' her joyful reception by her countrymen; her impassioned appeals to them to sally forth and attack the dismayed hosts of

the Syrians; the subsequent attack, and victory, and rejoicings, are all delineated with genuine poetic power. Indeed, there is nothing superior to it, in true poetic genius, in the whole range of Anglo-Saxon Poetry.

ART. VI.— *Writings of Hugh Swinton Legaré, late Attorney-General of the United States. Consisting of a Diary of Brussels, and Journal of the Rhine; Extracts from his Private and Diplomatic Correspondence, Orations and Speeches, and Contributions to the New York and Southern Reviews.* Prefaced by a Memoir of his life, &c. Edited by his Sister. In two Volumes. Charleston: Burgess & James. Philadelphia: Thomas Cowperthwait & Co. New York: D. Appleton & Co. Boston: James Munroe & Co. 1845.

The great names of the South are dying out. For want of an adequate record, men, whose genius the whole country honored in their lifetime, are beginning to sink into obscurity. With the decay of the present generation, the passing away of all contemporary evidences, all familiar memoranda, of their ability, services, and *personel*, we must lose forever those means whereby fresh and vivid portraitures of character are secured, and be forced to content ourselves with such meagre, and imperfect, if not distorted, likenesses, as the hand of the future biographer can draw, with the hesitating aid of Tradition, and the dry details of official documents. That 'Oblivion cannot be lured,' we know full well, but it *may be* injuriously anticipated; and in view of the present aspect of things, there is reason to fear that the illustrious names of the South will disappear before their time among these Lethean shadows which finally must embrace us all!

Of *one*, at least, of these wise and gifted men, we desire to re-

vive, however briefly and feebly, the recollection of the brilliant career; to show how he lived, labored, triumphed, and, in the course of a comparatively short life, achieved a reputation as unique as it was splendid. A scholar, solid, and profound; a lawyer of philosophical reach, and breadth of attainment; an eloquent Advocate, a sagacious Statesman, and a shrewd, courtly Diplomatist, he exhibited in all he thought, wrote, or did, an exhaustive thoroughness, the natural product of the genuine quality of his genius, and the ample resources of his learning. As an example of difficulties overcome, and discouragements mastered; of steady aims that never swerved, and a resolution for work-day details, which gave to his talents their practical force and emphasis, his life is no less remarkable than for the exercise of wholly exceptional endowments in a manner at once liberal and judicious. In his mind we recognize a fusion of the imaginative and logical faculties, as in his temperament we cannot fail to observe a high enthusiasm, moderated and controlled by a certain cautious reserve. This combination of qualities was natural to one in whose veins flowed the mingled blood of French and Scottish ancestors. He derived the fervor of his nature from Huguenot idealism and disinterestedness, its vigorous, dominant will from those iron Covenanters,[1] whose vocabulary held no such word as 'yield!'

Hugh Swinton Legaré was born in Charleston, S. C., on the 2d day of January, 1797. His father, Solomon Legaré, Jr., was immediately descended from one of that band of French emigrants who escaped to Carolina, soon after the revocation of the Edict of Nantz. His mother belonged to the famous family of Scotch Swintons, the hardy warriors of the Border, who, centuries ago, defended their own domains; or, more frequently, perhaps, harried the domains of their neighbors with battle-axe and brand, and whose deeds of prowess yet survive in Song and Legend. She was a woman of unusual strength of character, a circumstance fortunate, indeed, as her husband, dying in early manhood, left to her sole care the management and education of their son, then but little more than an infant.

[1] William Swinton, Mrs. Legaré's grandfather, the Surveyor General of the Province of South Carolina, between the years 1721 and 1732, was supposed (as well as his brothers, Hugh and Alexander) to be a *Covenanter*.

Up to the fourth year of his age, HUGH was noted for the possession of great strength and comeliness of form; he promised to develop a physique which might have been regarded with favor by his illustrious progenitors, the stalwart Baronial prickers, known as 'Archibald of the Axe,' 'Richard the Ready,' 'John with the Long Spear,' or even that 'Stout Sir Alan,' to whom Scott thus refers in his *Halidon Hill:*

> 'There needed not to blazon forth the *Swinton*,
> His ancient burgonet, the sable boar
> Chained to the gnarled oak, nor his proud step,
> *Nor giant stature*, nor the ponderous mace,
> Which only he of Scotland's realm can wield!'

But about this period he was inoculated with the small-pox. The artificial virus poisoned his whole system, assumed speedily a confluent form, and 'fixing upon the larger joints—elbows and knees—' resulted in 'deep imposthumes.' For months he lay suffering and enfeebled, and when at last the bonds of disease relaxed, he rose from his bed a wretched skeleton, that had to be carried everywhere upon a pillow. The tumors were finally subdued; but while they left the *trunk* uninjured, the lower limbs, which had promised such fine development, were arrested in growth, and became thenceforth hopelessly stunted, although neither weak nor withered. For eight years he gained hardly an inch in height; but then, the boy everyone had feared would be a dwarf, shot up suddenly and rapidly, only it was the upper part of the person—the upper part *alone*—that attained its normal proportions, so that he presented the singular and somewhat painful spectacle of a man whose magnificent *torso* was, as it were, mocked at, and travestied by, the uncouth imperfection of the members. 'Seated,' remarks one of his friends, 'his length of body, set off by a broad, manly chest, a noble head, and an air unusually imposing, he looked of commanding person; but *risen*, he seemed in a moment to have shrunk out of his bodily advantages.' Thus afflicted, the lad was debarred from the physical sports and exercises of childhood; he was driven to seek recreation in books, to concentrate his powers with precocious enthusiasm upon studies to which few others of his age could have found themselves allured.

The young scholar was at first fortunate in his instructors. After his assiduous mother had grounded him in the rudiments of English, he was placed under the charge, successively, of *three* teachers of ability. Of these, he was accustomed, in after years, to speak with warm gratitude, dwelling in a special manner upon his obligations to Dr. Gallagher, an Irish Roman Catholic Priest, who initiated him into the complex beauties of the Latin tongue, and to Mr. Mitchel King, a well-known *litterateur* of Charleston, afterwards Legaré's firm, life-long friend. Dr. Gallagher, more, perhaps, than any other, appears to have appreciated his pupil's genius. 'That boy,' said he of Hugh, then in his twelfth year, 'will be an honor to his country for erudition, and as 'an orator the Curran and Burke of America.'

At thirteen Hugh was sent from home to an academy, in one of the upper districts (Abbeville) of South Carolina, which had gained a great reputation under the management of the Rev. Dr. Moses Waddell. But the strict, conventional, didactic system which seems to have prevailed in this establishment did not suit the youth's ardent nature. The Rev. Doctor was wedded to forms and precedents. By *one* method only, in his view, could 'the young idea be made to shoot' in the proper direction. He recognized no exceptional mode of learning, as he recognized no exceptional minds. All must be subjected to the same discipline. All must be forced to fit—the petty, commonplace intellect by unnatural efforts at expansion; the richly endowed, by efforts quite as unnatural, at contraction—into the Procrustes' bed of a scheme, held sacred by prescription.

Legaré soon became dissatisfied. No intellectual *rapport* existed, nor could any have been established, between the master and himself. Mutually, and thoroughly, they misunderstood each other. Little or no consolation for this want of due comprehension on the part of the higher Power, was found by Legaré in the sympathy of his companions. On the contrary, he turned away from the school, and nearly everybody in it, with impatience, almost with aversion. His mother was persecuted by letters of every variety of tone, entreating, argumentative, passionate, despairing; the main burden of which was,

that he felt miserable in that place of narrow routine, that mental tread-mill, and desired to be instantly set free! But the good mother, however pained by his persistency and his genuine unhappiness, would not, upon this point, yield to his wishes. Her impetuous, eager, high-hearted boy must learn 'to submit to the yoke in his youth.' It was a hard struggle for them both. Yet, in the very midst of his wild discontent, his turbulence of soul and feeling, the son is ever chivalrously deferential to the mother, and the mother full of sweet, tender allowance for the hot humors of the son! One who had read some of the letters to which we refer, letters of appeal and answer, of earnest supplication and firm denial, declares them to have been exquisite evidences of a love as rare as it is pure and beautiful; a love which the years to come served only to strengthen and to sublimate. Public honors were heaped upon him, in his bright, successful manhood; honors of the Forum, the Senate, and the Hustings; but we are assured by those whom he had taken into his confidence, that the most dazzling of his intellectual victories affected him only, or, at all events, *chiefly*, as the means of gratifying the noble pride and love of the woman, who, in the absence of nearer ties, (for Legaré did not marry,) represented to him always the sacred charities, the profound attachments, of home. Moreover, in estimating the value of popular applause in his age and country, Legaré, Artist, Scholar, Philosopher, as he was, knew well that *such* approbation was too often in the inverse ratio of merit; that the audiences which thrilled at *his* eloquence, and were convinced by the potency of *his* logic, to-day, would be affected to an equal, perhaps a greater, extent, by any cunning demagogue who should address them to-morrow. Therefore, the 'plaudits of crowds' thundered by him unheeded. Even 'the admiration of Senates' could stir but slightly, and transiently one who, in his thorough self-knowledge, his deep but not arrogant self-appreciation, comprehended of course more perfectly than others the massive force of those arguments he had painfully elaborated, and the *real* significancy of those truths and illustrations, drawn by intense effort from a hundred storehouses of occult, and half-forgotten wisdom.

He might have exclaimed without one touch of vain glory:

> 'Gramercy friends! thanks for your most sweet voices!
> Thanks,—but I need them not!'

The difficulties at Dr. Waddell's school increased. For Hugh there was no peace. Together with some of his schoolmates from Charleston, he was accused of being a conspirator—a young Cataline—against the dignity and repose of the little scholastic empire! He angrily denied the charge, but the Doctor refused to credit him. *This* was unendurable! his solicitations to be taken away grew more vehement than ever, but luckily, his mother still held out against him, luckily we say, for in the end a better understanding was established between the boy and his master: the *latter* woke to a semi-consciousness of his extraordinary parts, and began to take some interest in their cultivation. It is but justice to confess—upon Hugh's own testimony, that the Doctor laid the foundation of the rich and varied Hellenic learning for which at a future period his scholar was so peculiarly distinguished.

Chastened in temper by the school discipline, however unduly strict, with habits of mental order and method superadded to a solid fund of acquirements and a high reputation for capacity, Legaré went from the Willington Academy to the State College, in Columbia. He matriculated in the Freshman Class of that institution while he was yet under fifteen. An associate and college rival, destined thereafter to dispute with him the honors of eloquence and statesmanship upon the broader theatre of the world, observes, in reference to this time: 'Legaré's reputation having preceded him, he was, on his arrival, an object of curiosity and interest to the students; while, on his part, with boyish ingenuousness, he was not indisposed to exhibit his acquirements, nor backward in giving it to be understood that he intended to run for the honors of his class. His previous attainments, the astonishing facility with which he added to them, and the eager industry with which he threw himself upon his studies, gave him at once a lead which he maintained throughout his course, until he was graduated, not only with the honors of college, but with a reputa-

tion in the State. He mainly devoted himself to 'the departments of Classical Literature and Philosophy, and he zealously engaged in the discussions of the debating societies, in order to practice himself in the art of speaking. These studies were a passion with him.'

Although a new foundation, the College, under the able administration of Dr. Maxcy, its first President, was in a highly flourishing condition. The Professors were conscientious men, of more than the average information and talents; but not to *them* did the young aspirant after all fair and noble things chiefly look for aid in his mental and spiritual progress upward. He had already learned that the wisdom of the dead, garnered in books, offered for his purposes and ambition, a talisman more potent than the formalism of professorial instruction, however logically and suggestively carried out. And so, the one bright centre of fascination to him in the midst of the decorous quiet of the little Academe, was the State Library, consisting then of only ten thousand volumes, but volumes admirably selected, and arranged with great tact and skill. There, every day after the hours of recitation, and invariably upon holidays, his still dwarfish figure, crowned by the leoline young head, with deep, earnest, melancholy eyes, could be seen making its way to some peaceful alcove, the arms loaded with folios, and on the countenance an expression of concentrated energy that foretold hard, vigorous, protracted work; work in which the student's innermost soul rejoiced. Amid such surroundings, it is probable that the rose-clouds of his childish fancies began, for the first time, to assume a definite consistency and form. The future rose clearly before him; a future set apart and made sacred by the loftiness and purity of the purposes to which it was dedicated. He would associate his name hereafter, with no ephemeral action, no dubious speculation; but would carve it, high and ineffaceable, upon the granite of *practical performance;* such performance as Genius alone, strengthened by an *armory* of attainments, can bring to worthy and efficient consummation! It was doubtless the suggestion of ends so important, that fired the boy-philosopher's natural enthusiasm, banishing languor from his eye-lids, and weariness from his

limbs, after entire days and nights devoted to intensest application. 'Often,' said a comrade of his to us, 'often when returning with the jovial fellows of our class from ball or party, perhaps from a secret and less legitimate expedition, to our quarters, have I remarked Legaré's candle burning long after midnight, and heard his voice, in sonorous recitation, rolling over the campus. But the moment our noisy approach caught his ear, (if it happened that we dared be noisy,) the recitations ceased; the light, however, burned on; oh, he was indefatigable; nothing could wear him down.'

But not within the walls of library and chamber only, was he wont to pursue his studies, or practice his recitations. Bent especially upon mastering every art of oratorical success, of 'vanquishing, by extreme care, the ungraceful action of limbs injured by disease,' he followed the example of Demosthenes, seeking, whenever opportunity favored his purpose, the solitudes of the wood and the sea-shore, 'pitching his tones to the murmur of the forest,' or declaiming, with impassioned gesticulation, to winds and waters. The masterpieces of ancient or modern English eloquence, would roll grandly in these moments of training, from mobile lips upon which Apollo, god of fiery passion, had set his seal in the youth's birth-hour. Or, oftener yet, the solemn chants of the poets—Homer's deep Hexameters, and Milton's 'lofty-builded verse,' would seem to take a new meaning and impressiveness from the earnest grandeur of his recitative. Briefly, knowing from the first, what all but miraculous charm lies in appropriate and striking action, what an instrument to sway and kindle the remotest depths of man's heart, Nature has given us in the human voice, he bestowed upon *both* a minute elaboration of culture, the ultimate results of which were an elocutionary perfection unparalleled among his rivals and contemporaries. 'His articulation,' we have been told, 'became golden in its distinctness; his intonations, without any false or unmanly cadences, that gave the idea of artifice, as pure and beautiful as those of Italian song. To *this* alone, indeed, as a system of sound the most perfect, could his management of speech be likened. Thus trained, his voice became clear musical, delicate; true in its minutest inflections;

while in its more vehement bursts, it grew capable of filling the air with its absolute thunders, to which we have often felt a large legislative hall tremble and ring. He conquered, in like manner, or contrived to hide, his bodily defects, so as to attain a command of gesture, sufficient to second the beautiful recitative of his voice, and the play of features highly oratorical, even in the only part where they deviated from regularity; lips and mouth large, passionate, and scornful; a countenance altogether striking and imposing, lighted up with high intellect and feeling, and fit to mirror all that eloquence can express.'

The first *two* years of Legaré's college course were passed by him in a seclusion that might almost have been called monastic. He eschewed, with but few exceptions, the society of his fellows, communing only with the immortal dead. During these important years, there can be but little doubt that he laid, broad and strong, the *foundation* of the vast and multifarious learning, which, in the maturity of his attainments, entitled him to the renown of an intellectual Crichton.

Side by side with the great epic and tragic poets of Greece and Rome, he studied Milton and Shakspeare, choosing rather to be indebted for his stores of philological knowledge to the practice of such masters, than to the *hortus siccus* of the grammarians. From the antique tongues, he passed to the modern dialects derived from the Latin, French, Italian, Spanish, Portuguese, to which, later in life, he added a critical knowledge of German; a language, we may remark in passing, little studied, forty years ago, even among the most accomplished English scholars, with, of course, the note-worthy exceptions of Coleridge, De Quincey, and Carlyle.

The mental tastes of the youth, so liberal, and true, were never in after life vitiated. Homer, in all that was worthy and characteristic of the 'foremost of mortal wits,' he knew very nearly by heart. Portions of the Odes of Pindar he would declaim with fervid emphasis and action. Plato was ever near him, to be quoted as the most philosophic of idealists, and the most ideal of philosophers. Demosthenes and Cicero were his handbooks, each his *vade mecum*, of the true, oratorical sublime; whilst of Thucydides—whom, his only biographer

assures us, he adored as a profound historian, an able soldier, an accomplished orator, and a writer unmatched in all the severer arts of composition---it is certain that he made, in some most important respects, a model, and an exemplar!

The same robust preferences distinguished him in all his excursions among the fields of more modern literature. It was Rabelais, Montaigne, and the rich old Chroniclers, the quaintness of the Fabliaux, and the legendary beauty of Provençal song, that mainly attracted him in the French. Of Italian classics, the stern Florentine,

'——the marble man of many woes,'

possessed for his own somewhat sombre genius a tenfold stronger attraction than Boccaccio in the heat-lightning of his summer wit, or Petrarch eternally bemoaning the coldness and caprices of his Laura. And next to Dante, he studied and admired Machiavelli; penetrating at once, by a sort of instinct, the mere surface of his satire, and appreciating every tortuous turn of his logic, every manifestation of his ironic wisdom; taking refuge in epigram and symbol, long before the keen discrimination of Macaulay had thrown a vivid and original light upon the enigmatical pages of the *Prince*.

Tracing the action of his mind, and the tendency of his tastes thus far, one could (even without any positive information on the subject) have anticipated with certainty what portions of English Literature were sure to demand his warmest approval and homage. Not the smooth cleverness of what has been termed 'the Augustan age,' the facile humor and easy correctness of Steele, and his gifted associate, the 'parson in the tye wig;' not the imported frivolities and blasphemous sarcasms of the *Restoration*, to which even Dryden succumbed, when he composed his licentious Plays, and blindly undertook to '*tag* the verses' of *Paradise Lost;* but the 'Heaven of Invention' that blazed over England in the reign of Elizabeth, the light and glory of which were embodied in the strenuous lines of Marlowe, whom Drayton describes as

'Up to the chin in the Pierean flood!'

and in the multiform genius and words of such men as Marston, Heyward, Jonson, Fletcher, Beaumont, Chapman, and the author of those sweetest lines ever penned, perhaps, by mortal, referring to immortal goodness:

> 'The best of men
> That ere wore earth about him, was a sufferer,
> A soft, meek, patient, humble, tranquil spirit,
> *The first true gentleman that ever breathed.*'[2]

Toward the conclusion of his college course, Legaré somewhat relaxed his aceticism of manner and habit, but not of labor. He still persisted in giving seven hours to classes and recitations, and eight hours to his own favorite studies, devoting what remained of the time to meals and slumber. By this time, every one had come to look upon him as a marvel of ability and persistency. His fellow-pupils conferred upon him, with enthusiastic unanimity, the Presidency of their Literary Society; and when, some months later, he was graduated, as we have already said, with the greatest honors, there went with him from his *Alma Mater* predictions of a future renown, singularly undisputed and emphatic!

From Columbia, Legaré repaired without delay to his mother's home in Charleston, then, as always, both to his eyes and to his heart, the brightest spot on earth. About the city itself his deepest affections were entwined. Wherever the needs or duties of his subsequent career carried him, he would watch from afar its progress, and the progress of the State, with an almost painful solicitude. When, years after, he held a responsible diplomatic position at Brussels, news reached him of a momentous political crisis, rife with grave dangers to his fellow-citizens and to South Carolina. Immediately he addresses a friend as follows: 'Dangers are around, above, below, and within our poor little State, which may God preserve us from. I ask of heaven only that the little circle I am intimate with in Charleston, should be kept together while I live, in health, harmony, and confidence; and that on my return I may myself be enabled to enjoy, in my intercourse with it, the same hap-

[2] Dekker's description of Christ.

piness with which I have been hitherto blessed. We are, *I am quite sure, the last of the race of South Carolina; I see nothing before us but decay and downfall;* yet, on that very account, I cherish its precious relic the more. My ambition is dead, and I think only of repose and social enjoyment, and *usefulness* hereafter. But my heart sinks within me often, when I think of what may too soon be, and I say in those touching words, "Why should not my countenance be sad, *when the city, the place of my fathers' sepulchres, lieth waste, and her gates are burnt with fire!*"'

To us, occupying our point of view in 1869, this language, penned thirty-seven years ago, has all the weight and meaning of a solemn prophecy. A prophecy how dreadfully fulfilled! And yet was Fate merciful in this; that of all those brightly-endowed children of a metropolis and State, (left now more desolate than Niobe,) in whose society Legaré shone conspicuous, but *one* survives, moving among the wrecks of everything he had once loved and honored, a melancholy Sir Bedivere, forced to stand 'companionless,'

> 'While the days darken round him and the years,
> Amidst new men, strange faces, other minds.'

How bitterly must the unfortunate native, who now shrinks, like a stranger and alien, through the streets of the city of his birth, refer to the fast-waning traditions of the fame and prosperity of Charleston! A brief half century ago, and culture, refinement, hospitality, wit, genius, and social virtue, seemed to have taken up their lasting abode therein. A constellation of distinguished men—writers, politicians, lawyers, and divines—gave tone to the whole society, brightened and elevated the general intercourse of men with men, and threw over the dull routine of professional and commercial labor, the lustre of art, and the graces of a fastidious scholarship. It did not take them long to recognize the stuff of which Legaré was made, and to admit him to their 'charmed circle' as a brother and equal. Every higher power and aspiration of the young man's soul, was healthfully stimulated by contact with the kindred souls of thinkers, and well-trained athletes of the Council-chamber

and the Bar. For the first time, he found a 'lively congeniality with whatever a scholar's mind might seek for its recreation, or in its repose.' Charleston grew at once the centre of his chief personal attachments. 'To win its judgment, and be cherished by it, became the more intimate and cordial thought of an ambition, which with him was always more than *half* of the heart! As he referred the main personal gratification of his future successes to his mother, so did he to Charleston the principal delight of any public admiration. It came, in a word, to be the immediate idol of his public feelings, nearly such in his half-antique mind, as was the Greek city to its ambitious inhabitant; his *lesser* country; the object of a nearer patriotism than the *wider, colder one beyond.* The rest was duty; this, affection.

While yet at college, Legaré had passed in mental review the different liberal professions, and had selected for his own study and pursuit, the Law. We may be sure that, even at the outset, comprehending, as few are able to comprehend, the importance and magnitude of a science built up by the wisdom of ages, he entered, with no light vanity, or overweening hopes of speedy distinction, upon the endeavor to master, first, its broad principles, and in due course, its formulæ and technical details. His desire to concentrate his powers, for a season, upon the *rationale* of Jurisprudence, caused him, instead of entering an attorney's office, to place himself under the general supervision of his old tutor, Mr. Mitchell King, now a 'leading' lawyer at the Charleston bar. Following his suggestions, and guided by his tact and experience, the young man entered upon a comprehensive course of legal reading, judiciously enlivened, now and then, by excursions into the brighter regions of *belles lettres*, and his favorite classics. These studies engaged his undivided attention for *three* years. At their close, he found that he was of age, and fully, nay, elaborately, qualified for admission to the bar. He did not, however, submit himself to the necessary examination just then. His plans were different from those of the majority of persons in his position.

Aiming at the loftiest standards of erudition, attainable by genius and energy, he determined to complete an education so

auspiciously begun, by attending the great schools of learning on the continent of Europe. In the heyday of strength and youth, with a temperament passionately sensuous, it is yet to be remarked, that every gross or unworthy instinct, frequently aroused in those youths who contemplate the *grand tour*, seems in him to have been subdued by the purer ardor of his scholastic devotion. Then, as in maturer life, Legaré viewed, with the bitterest contempt, that large class of travelled fops and *dilettanti*, to whose eyes a Celeste, or Ellsler, was a thousand times more fascinating than the graces of the Apollo, or the sublimities of the Transfiguration; and who, scarcely recognizing the names of such men as Göethe, Savigny, or Schelling, were marvellously familiar with the grossnesses of Sue, or the last sentimental abomination of Paul de Kock. Not upon the Boulevards, the *fêtes*, and the gay assemblies of Paris, but upon its mammoth libraries, its stores of art and science, the fancy of Legaré was fixed; and in thinking of Germany, his mind contemplated, not the smoky orgies, or uproarious merriment of out-door student life, but the exhaustless information and deep capacity of that greatest of the expounders of the Roman and Civil Law of whom our age can boast,[3] and whose genius subsequently furnished him with a theme for endless, fervent panegyric.

Armed with the self-restraint which a noble and settled purpose never fails to give, Legaré, in the spring of 1818, sailed from Charleston in a merchant ship, bound for Bordeaux. Fortunately, his *first* letter from abroad, descriptive of his passage, and his future plans, has been preserved. It is specially to be noted, as furnishing, in parts, some vivid touches of self-portraiture:

'Bordeaux, 24th June, 1818.

'*My Dear Mother:*

'Our passage across the Atlantic was as delightful as could be desired. With the exception of some slight squalls, and one thunder-storm, we had always fine weather. Indeed the whole voyage was more like a party of pleasure on some smooth lake, than a transit over the great ocean.

[3] Savigny.

'We arrived within the Garonne on the thirty-fourth day—a very short passage, if a calm of one week be (as it might in reason) deducted.

'It is impossible for me to describe the *anguish* with which I tore myself from you on the day of our separation, and which was so keenly renewed when I left the wharf and the harbor of Charleston. To realize *such* sensations, a man must not only be placed in the same situation, but must have the same turn of mind, as myself. He must be *violent almost to madness in his passions*, and must at the same time experience *more* than *one!* He must forget how to *hope*, and while he aims at everything exalted, must look for nothing but disappointment and mortification. In short, I am persuaded that such situations as mine was, at that time, very rarely occur in the course of one's life; at least I wish to persuade myself so. It was a dreadful conflict of opposite feelings, that threw me into such a state of irresolution, as must, if indulged, prove fatal to every generous undertaking.

'Well, it was impossible for me to change my nature, and I am not ashamed of the tears I shed; but I have reason to congratulate myself upon the constancy with which I adhered to my resolution of departure. . . . A *glorious* prospect is set open before me, and I—thank God!—have spirits enough to think of availing myself of every advantage, and realizing every hope.

'On Monday or Tuesday, (the 29th or 30th June,) I set off upon my journey to Paris, where I will remain until the latter end of September. I intend to *perfect* myself there in the French language—that is, to acquire the greatest facility, and some degree of correctness, in the use of it, for such is the whole force of the term *to perfect*, when we speak of making, within any given time, a progress in a language. . . .

'As soon as settled in Paris, I will employ *three* teachers, who shall attend me at my lodgings every day; an Italian, a scholar who is thoroughly versed in Latin, and who will assist me in French; and perhaps, a *drawing-master*. For I have already had cause to regret that I had not the use of the pencil, as I passed along those enchanting scenes that adorn the banks of

the Garonne. In this *last* idea, however, I am by no means fixed, as I shall certainly not think of taking up with any *new* pursuit, unless I see it is perfectly consistent with my old ones.'

While in Paris, Legaré perfected himself *practically*, as he had designed, in French and Italian, and dropping, for a time, his favorite Greek, once more applied himself to the Latin, as the necessary vehicle of his proposed course of civil law. Meanwhile, even his relaxations and amusements were turned to the best mental account. Operas and theatres did not merely employ his eye; he penetrated beneath the outside show, the surfaces of things, to a true knowledge of national characteristics and national foibles. At the Legislative Chambers, listening to the debates of such representative statesmen and orators as Chateaubriand, and Manuel, he attained to a large knowledge of French politics and internal history, which proved of incalculable service to him long afterwards, when he entered the ranks of Diplomacy.

A picture of the minutiae of his Paris life, has been furnished us by Legaré's friend and companion at the period, William C. Preston. The Louvre and other art-galleries, we learn, furnished him with continual imaginative delight. The *former*, though stripped of its Italian and Flemish treasures, was still—excepting the collections of Florence, and the Vatican—the noblest depository of artistic *chef d'œuvres* in Europe. Legaré revelled among its master-pieces. By the help chiefly of his vigorous native taste, and keen faculties of comparison and analysis, he became no mean art-critic. The mere jargon of conventionalism he detested; it met with no mercy at his hands. Next to the Louvre, the magnificent acting of Talma, and Duchesnois, surprised and charmed him most. In regarding Talma, indeed, it would appear, (as he afterwards observed to an accomplished lady friend,) as if the more majestic of the ancient statues, upon which he had recently gazed, were suddenly endowed with life, for this wonderful actor had so studied the Antique, that 'his scenes and attitudes were often but so many classic pictures.'

Occasionally, Legaré would indulge in the more innocent amusements of the Great Capital. Though, on some points, a

morbid and melancholy man, subject to moods of terrible and even dangerous depression, he *could* be as gay and frolicsome as a child. Possessing but little humor himself, he yet richly enjoyed its exhibition in others, and his laugh, we have been told, was wonderfully cordial and contagious. It must have been a pleasant sight, as his friend Preston hints, to witness the uproarious merriment of the usually grave and self-contained student, at the farces of the *Varieté*, and the burlesques of *Poitier*, and the *Vaudeville!* From his hearty enjoyment of such spectacles, he derived new strength for the serious labors of the closet.

In Paris, Legaré instituted careful inquiries as to the respective merits of the British and Continental law-schools, the answers to which determined him to abandon his first purpose of going to Göttingen, and to substitute Edinburgh in its place. Accordingly, about the close of September, 1818, he left Paris *en route* for his ancestral Scotland. The journey was interrupted by a brief stay in London. There, of course, he visited those numberless localities made famous by historical and literary reminiscences; but in some respects, the period of his visit was unfortunate. All the *élite* of the city were absent, the Parliament Houses were closed, and, indeed, as a true Cockney informed him, 'London was no longer London!' So, when a week or two had passed, he set out for the 'Border.' His feelings, as he approached those 'debatable lands,' centuries ago the home of his stout forefathers, and the scene of many a desperate fight and foray, he was accustomed to describe to his friends, with a strange blending of satire and eloquence. 'Had I been a poet,' said he, 'I would straightway have penned a ballad in honor of my illustrious progenitors, a furious, fiery ballad that would, as Sir Philip Sydney remarked of "Chevy Chase," have "stirred all hearts like the sound of a trumpet!"' 'I fear, however,' he added with a comical twist of the eyebrows, 'that those forefathers of mine, with all their gallantry, were incorrigible "cattle-lifters," and involved in much moral confusion upon the questions of *meum* and *tuum!*'

When Legaré reached Edinburgh,—then under the literary and legal rule of Scott, Jeffrey, Wilson, Leslie, Brown, Play-

fair, and Alison,—he entered without delay the classes of Civil Law, Natural Philosophy, Mathematics, and Chemistry. Upon the first of these—the Civil Law—then expounded by Professor Irving, he chiefly lavished his enthusiasm and his labors. Mr. Preston, by a happy coincidence again his fellow-student, writes: 'He gave three hours a day to Playfair, Leslie, and Murray, (the Professors respectively of Natural Philosophy, Mathematics, and Chemistry,) in the lecture-rooms. From eight to ten were devoted to Heineccius, Cujacius, and Terrasson, side by side with whom lay upon his table, Dante, Tasso, Guicciardini, Davila, and Machiavelli.' These various, and one might think conflicting, studies, Legaré pursued and mastered with the tact and ease which belong to well-disciplined genius. His assiduity has been seldom paralleled, and only the iron texture of his constitution sustained him under the stress of efforts which would have sent a man of ordinary strength to a sick bed, or—the asylum.

Actually, on *one* occasion, he found himself at breakfast, Sunday morning, on the *same seat* where he had breakfasted the day before, not having quitted it, meantime, for more than a few minutes. Still, he mingled in society. He sought the acquaintanceship of congenial spirits, and succeeded in making some staunch friends. Professor Irving, it appears, was a person of but moderate talent and attainments, which, however, he made as serviceable as might be, by constant attention and earnest toil. In pursuance of an ancient scholastic custom, the class-room business was conducted in Latin. It happened, one morning, while Legaré was up for examination, that the Professor took exception to his rendering of a certain crabbed passage in the Institutes. Legaré, assured that he was right, maintained his opinion, at first moderately, but afterwards, upon the spur of what seemed to him a dogmatic and ignorant contradiction, with such warmth, and fire, illustrating his points by a body of precedents so overwhelming, and a display of learning so *recherche* and profound, that teacher and class were alike amazed, the former exhibiting no little discomfiture, which he vainly attempted to conceal by putting a stop to the oral controversy, transferring, subsequently, his own arguments to writing.

In February, 1819, Legaré received a letter from his mother, which somewhat unsettled his plans, and shortened the period of his stay in Europe. It seems that the good lady's pecuniary affairs, notwithstanding her sagacious activity, had suffered during her son's absence, *apropos* to which Legaré observes, in answering her communication:

'I now regret that I have said so much to you about travelling in Italy. As that would be quite inconsistent with the present state of your affairs, it will only serve to excite unavailing regrets to mention it. Besides, in the actual state of my own mind, I would not wish to do it, and I have come to the determination, upon reading your letter, to return home next fall. Meantime, I propose to make a short tour in the Highlands, and then return immediately to London, where I shall spend a few days in order to see Parliament in session, Richmond Hill, and a few other things which I had not time to visit when I was there in October. Then I will take a packet for Ostend, so as to travel through Holland, and see some of its principal cities, on my way to Berlin, or some other German University. There I shall spend May, June, July, and August. I then take up my line of march back again to the Rhine, travel up that river as far as Basil, make a little trip through Switzerland, and return by way of Paris to England. The last step will be to transport myself by packet to New York.'

At the conclusion of the winter's course in Edinburg, Legaré immediately proceeded to carry out practically, the details of the plan as sketched above. In this he was happily successful, with the single exception of his contemplated residence in Germany. Certain political disturbances at the universities of that country, an *émeute* of the 'young German' element, as it was called, forbade his adventuring upon such dangerous ground. But perhaps the months were more profitably spent, after all, in active travelling, in a study of men, manners, governments, and social phenomena, not through the medium of books, but, as it were, face to face.

From this period, we may date Legaré's determination to supplement the acquisitions of the study with a thorough

knowledge of mankind and of the world. His temperament disposed him to be a literary recluse, but that good sense which was always a distinguishing quality of his genius, imperatively commanded him to mingle with his fellows, if, indeed, he would prepare himself for the intellectual conquests he had long meditated. Thus, no opportunities for practical, instructive intercourse, whether with high or low, prince or peasant, were neglected by him. He became as shrewd, ready, and observant, as capable of managing the every day affairs of life, as before he had been deeply versed in all scholastic learning.

About the close of the year, (1819,) Legaré set sail from a continental port for New York. Thence, he made his way overland to Carolina, stopping for some weeks at Washington, where, we are informed, his enthusiasm, his brilliant conversational talents, and display of varied, unusual attainments, won for him the admiring attention of the best society.

January, 1820, found Legaré once more at his home in Charleston. He had been absent for two years, employed in the sternest mental discipline, and now, it has been quaintly said, 'he returned somewhat as Milo, the wrestler, might have done to the public games of Italy, from the *palaestra* of Greece, not an effeminate wanderer, unnerved by foreign delights, but an athlete, of skill almost as formidable as his strength was terrible.' Public expectation was agog concerning him. His native powers, and scholastic acquirements, were alike referred to, as altogether exceptional and remarkable. But he did not pause among the social circles of the city, to gratify either his own vanity, or the curiosity of others. On the contrary, he applied himself at once to the performance of a practical duty. Mrs. Legaré's affairs were seriously involved, and her son, with his usual ardor, set about retrieving them. He went to reside with her and his younger sister, upon the patrimonial estate on John's Island, combining, with the daily labors and drudgery of plantation life, a renewed study of the Common Law. Fully prepared for legal practice, he was yet in no haste to engage in it, but went on carefully adding to his large stores of information.

Legaré's neighbors soon learned to give him credit for per-

sonal worth, no less than for variety and solidity of talents. His family *éclat*, too, had always been considerable; we are, therefore, not surprised to find that at the fall elections of this year, a seat in the State Legislature, from his Parish, (composed of John's Island and Wadmalaw,) was offered to him. Knowing that his legislative toils would not be so onerous, or protracted, as to interfere with other important duties, he acceded to the wishes of his friends, and was accordingly returned to the Lower House of the General Assembly of South Carolina, for its *biennial term*, viz., from 1820 to 1822.

Legaré's first entrance upon the stage of public life, was not distinguished by any special brilliancy of display. Indeed, so seriously and *exclusively* did he apply himself to the mere routine of legislative business, to the minutiae of committee work, and the practical mastery of all needful parliamentary rules and tactics, that a portion of the public, accustomed to the *per saltum* efforts in oratory and debate of the majority of young aspirants, were disappointed by the policy he chose to pursue, and evidently thought him an over-rated man. They could not understand *why* he desired to be '*useful* before he strove to be *great!*' Nevertheless, at the end of his second session, one or two favorable opportunities occurring, Legaré very clearly proved the great powers he possessed, flashing out in debate with that peculiar eloquence, compounded of imagination and logic, in which, subsequently, he excelled.

In 1823, Legaré disposed of his mother's plantation on John's Island, and removed with his family to Charleston, where, formally admitted to the bar, he sought for practice as an Advocate. At this period, the Charleston Bar was perhaps the ablest in the entire South. It could boast among its chief members, of James L. Petigru, with his comprehensive knowledge of the subtlest forms of Common Law, his shrewd wit, his versatility, and adaptability of resources, his genial humor, and emphatic common sense, before which all metaphysical complexities and fine-spun, but illogical distinctions, would melt away like frost from sunshine; of Robert Y. Hayne, whose consummate tact, readiness, and experience, were equalled only by his powers of broad generalization, which gave to all

his weightier arguments a high philosophic value, his knowledge of mankind, and an intuitive sympathy, that gave him as a special pleader—particularly before juries—an influence almost irresistible; of Drayton with his calm logic, his thoroughness of acquisition, and his penetrative wisdom; of King with his scholarly expansiveness of thought; of Grimké, whose fervid temperament, and enthusiasm of declamation, were balanced by the soundest learning of the lawyer, and the most brilliant accomplishments of the *litterateur*. Such were the veterans among whom Legaré had now to appear. With a modest confidence he confronted the trained athletes of the legal arena. By them his force and skill were at once acknowledged; and had business come to him in anything like the proportion one might have expected from the early establishment of his fame, he would soon have been a man of wealth.

But Legaré had yet to learn the penalty which attaches to what is vulgarly considered, 'an over education.' The very brightness of his parts and the variety of his knowledge, seriously interfered with his practical advancement. His elder contemporaries of distinction had already fought their way up to position and opulence. Whatever impertinences in the way of superior talents, and preparation beyond the average, they had once exhibited, could no longer be brought against them in the face of a solid, unequivocal success, made the more manifest day by day. But the young Jurist was beginning his career. He had presumptuously, and after infinite trouble, clothed himself in a suit of mental armor, and procured a number of intellectual weapons, which, to the common Professionalist, seemed useless if not cumbersome. He must be made to smart for his arrogance. Moreover, according to the vulgar argument, so finished a scholar was sure to be a mere *theorist*. Everyday mortal concerns would suffer detriment, if entrusted to his care. And so, it happened in Legaré's case, as it has happened in many others, that the very conscientiousness wherewith he had equipped himself for business, proved temporarily the means of driving business from him. A swarm, too, of little, envious minds, the human wasps and hornets that are accustomed to buzz angrily about the head of Merit, longing

for a chance to sting, did not, of course, overlook the young Giant who shamed their own insignificance. It may be imagined, therefore, that the first years of Legaré's professional experience were neither pleasant nor encouraging. Petted, caressed, and admired, hitherto, wherever he had gone, he was now subjected to a trial of the sternest and severest kind. The temptation to despise the provincial community about him, to conclude that even its ablest men had succeeded through the operation of some unworthy arts, must have been, for a season, powerful indeed.

But Legaré resisted it. The moral stamina which lay beneath his mental brilliancy, enabled him to overcome every suggestion of egotism and weakness. He determined to wait; to work in quiet, and to exercise a patient endurance. In due time his reward came. With a 'general reputation still vastly disproportioned to its legal rewards,' he was, after some years' residence in Charleston, elected by a handsome and unsolicited vote, to represent that city in the State Legislature. Thus, in November, 1824, he again appeared in that body. At last, his path seemed to be comparatively clear of obstacles. Yonder, in the dim and lofty distance, shone his goal. Henceforth, his life was one steady, wise, indomitable march towards it.

The germs of the Nullification controversy had already shown themselves in the Legislature of 1824. Legaré now assumed his proper position in all debates of importance. When Judge William Smith introduced his famous Resolutions, 'Anti-Bank, Anti-Internal-Improvement, and Anti-Tariff,' he firmly sustained them, in accordance with the views he then, and ever afterwards, held, of the nature of the General Government and Constitution of the United States, and the reserved privileges of the States. Yet, while unhesitatingly going to the full extent of the Judge's Resolutions, he never for a moment contemplated those extreme measures, that final, and, as *he* deemed it, *desperate* remedy, subsequently advocated by the three great Carolina Statesmen, Calhoun, McDuffie, and Hayne. By constitution and conviction, Legaré was a Conservative. So, while opposing the Tariff and all kindred measures, by every

means which he considered legitimate, he recoiled, to use his own language, 'from that urgent form of civil controversy which left nothing to the General Government but an alternative fatal to either its own or State authority—the alternative, or rather, dilemma, of *subjugating* or of *being subjugated*.' When, therefore, a few years after, the issue was squarely and sharply made, Legaré resisted Nullification as a practical political remedy, considering it worse than the evils complained of, and sure to lead, in its ultimate operations, to irremediable misfortune.

It was while Legaré still held his seat in the Legislature, that an important movement of a politico-literary nature, took place in Charleston. We refer to the establishment there, of the *Southern Review*, as an organ of Anti-Consolidation, and a general exponent of Southern scholarship. From the beginning, this profound and brilliant quarterly owed a great part of its interest and value to the exertions of Legaré. He became virtually its editor, gathering about him such a corps of *collaborateurs* as few periodicals, English or American, have ever been able to boast of. Among them, we may mention Dr. Cooper, like Parr, a walking encyclopœdia, but without Parr's dogmatism and coarseness; Nott, an able antiquarian, and historical scholar; Henry, a thorough-paced Grecian, who, if somewhat heavy and diffuse, was always to be trusted for the justness of his views, and the solidity of his attainments; McDuffie, an eloquent and impassioned thinker, if not invariably a classic writer; Wallace, a mathematical Professor, and adept in general science; Petigru, whose deepest and dryest excursions into the realms of Law, would be lightened by his inimitable wit; and Elliot, Hayne, Harper, Simons, and a number of lesser lights. The *Review* owed much, undoubtedly, to the talents and resources of these various writers, but it must be confessed, nevertheless, that it was *vitalized*—made a living representative of the most advanced culture of the age—by the genius and learning of Legaré. Of his essays included in this work, 'Cicero de Republica,' 'Kent's Commentaries,' 'Roman Literature,' 'Classical Learning,' 'Memoirs of D'Aguesseau,' 'Jeremy Bentham,' and 'The Public

Economy of Athens,' are noteworthy among the weightier papers; whilst 'Lord Byron's Character and Writings,' 'Hall's Travels in North America,' and 'Sir Philip Sydney's Miscellanies,' show the author's capabilities in a somewhat less exacting department of literature and thought.

Were we called upon, however, to select Legaré's masterpiece in the line of the Essay, we should pass over even his noble treatise on 'Demosthenes,' and point to that luminous, profound, and exhaustive article wherein he has made an exposition of 'The Origin, History, and Influence of Roman Legislation,' an article in which the whole theory and practice of the Civil Law, and the various authoritative Codes, in their bearings upon life, manners, and sociology, in ancient Rome, are treated with a depth of research, and a clearness of logical acumen, unequalled, to our mind, in the best essays, upon a kindred subject, by Brougham and Hallam. The reader who carefully peruses this paper, will find epitomized in it, all the great distinguishing characteristics of the author's intellect and style, his searching sagacity, his close analytical judgment, his breadth of reasoning, which, like Coleridge's, may be called 'orbicular,' (combining the widest generalizations with the minutest details,) his unerring logic, and rich, grave imagination, embodied in periods ornate, rounded, elaborately artistic, which possess a certain *rhythmic* swell and cadence, whenever the thought becomes duly impassioned; the whole steeped and harmonized, so to speak, in the essential spirit of the rarest philosophic learning.

Legaré's labors on the *Review* proving, in the course of years, altogether too heavy, and threatening to interfere both with his growing practice and with his official duties, he abandoned its management; or, we should rather say, he discontinued his contributions; a circumstance followed, first, by the decline, and, soon after, by the utter extinction, of the periodical.

In 1830, Legaré was chosen Attorney-General of the State. This honor came to him unsought. That it was, indeed, the reward of acknowledged merit, and pre-eminent fitness only, may be seen in the fact that those who elected him were chiefly members of an inflamed political party whose measures he

steadily combatted. But the splendid genius of the man, his uprightness, candor, and amenity of bearing, conciliated the good will of his bitterest party opponents. The confidence of the Legislature was justified. In the high office conferred upon him, he rose rapidly to distinction, which was soon destined to pass beyond the limits of the State. Summoned, professionally, to argue an important case at the Bar of the Supreme Court in Washington, his success was so extraordinary and peculiar, that it procured for him the notice and attentions of the then Secretary of State, Mr. Livingstone. A formal acquaintance soon ripened into friendship. The Secretary had discovered that Legaré, like himself, was enamored of the far-reaching wisdom of the Civil Law, and this point of sympathy between them led to much discussion, which resulted in stimulating Legaré to the formation of an exceedingly comprehensive purpose, viz., the gradual 'infusion of a large portion of the spirit and philosophy of the Civil law, and even of its forms and process, into the more common system of Jurisprudence.'

It was urged by Mr. Livingstone, that the peculiar condition of our country, in which so much is new, and such essential modifications of pre-existing systems are necessary, seemed to be adapted to the introduction of an *eclectic system* of Municipal Law. Our political institutions, our republican habits, even our physical condition, have forced upon us great changes in the system of common law, and appear to open the way for further alterations with less difficulty and danger than would attend such an attempt in England.

This conception (if we may venture upon a euphuism) of making himself the High Priest of a marriage between the Civil and the Common Law—of so fusing whatever was harmonious in the constitutions of each, as to produce a system incalculably nobler and wiser than the present—became henceforth, with Legaré, a sublime intellectual ambition, which he did not despair of practically realizing. In order that every means towards the accomplishment of such an end should be afforded him, by placing within his reach *all* the appliances of legal science, he was offered by Mr. Livingstone the position of *Chargé d' Affaires* at the Court of Brussels. By this time, the elements

of discord in Carolina seemed darkly and swiftly gathering their forces for some fearful convulsion. He could not conscientiously support the policy of Nullification; nor, on the other hand, being one of a hopeless minority as regarded *that* question, could he expect to organize any effectual opposition; therefore, he wisely accepted the diplomatic mission so handsomely tendered him, and repaired, without delay, to the scene of his new duties.

And now, twelve years after his first visit to Europe, at the comparatively ripe age of thirty-five, Legaré found himself in a most congenial society and position. He was placed, with abundant leisure, in 'the midst of a country where learning has always flourished, and where great and ancient Libraries have accumulated; Paris within easy reach; Göttingen at hand; Berlin not far off; and the learned bodies of Northern Germany ready to lend him their immense stores.'

No wonder that he now threw himself into study with a sort of frenzy of enthusiasm. Under *Savigny*, he passed through a fresh course of Ancient Jurisprudence, and Roman and Civil Law; whilst, as a recreation after these severe studies, he devoted considerable attention to the German language, of which he acquired an unusual knowledge, and the German Literature, which few men were better fitted to appreciate. He is also said to have become a proficient in Low Dutch, and in Romaic.

As for his public functions, they were by no means onerous. He *voluntarily* addressed to his Government what Mr. Preston has justly characterized as a *masterly* series of regular reports, embracing a continual survey of all the main movements of European policy. Urbane and courteous in every official relation, he was truly a model Minister, uniting, in extraordinary conjunction, the best qualifications of the diplomatist and the scholar. By Leopold of Belgium, his Queen, and the whole Court, Legaré was warmly esteemed. Indeed, the King, in especial, seems to have formed for him a genuine personal friendship. His unstudied 'Diary,' faithfully kept, during these years, is a most interesting record of his deeds and thoughts, of his adventures *in* society and *out* of it, of the course of his studies, of his private sentiments, habits, and feelings;

in fine, we have, herein, clearly and truly presented, the man as he was by nature, untramelled by the buckram of etiquette, or the necessary restraints of conventionalism. His careless self-portraiture is not without its darker shades. We cannot but perceive that Legaré was often morbid, melancholy, and unhappy. Constitutional causes, some occult results of a defective organism, displayed their baneful influences in darkening his moods, and tinging, at certain seasons, his views of life in general, and of his own existence and prospects in particular, with a despondent, if not hopeless, gloom. Doubtless, an exaggerated sense of his physical defects had much to do in producing these sad, unwholesome humors. Passionately affectionate in soul and temperament, he persisted, when the 'dark hour' was on him, in considering himself exceptionally unfortunate,—a being forever debarred by the cruelty of Fate from the tenderest ties of domestic love, the more intimate sanctities, of heart and home.

Not long previous to his departure from Belgium, he was informed of an attempt to revive the extinct *Southern Review*, on the part of a State Society, the members of which earnestly desired him to assume the Editorship. But he refused, thinking the attempt chimerical. Moreover, he was now self-devoted to other labors.

In the autumn of 1836, after an extensive tour through Northern Germany, he bade a final farewell to Europe. He does not appear to have returned to his country in a cheerful spirit, if we may judge from the tone of a letter, addressed to his friend, Mr. Huger, not many months previous to his departure.

'With regard to your inquiries about my poor self, do you think, *dear Huger*, that one whose illusions have all, one after another, been dispelled, can have the heart to think of himself? "Satisfy my ambition!"—Why, I never had any *ambition*, properly so-called; it was perhaps my bane to have none. The aspiring after *excellence*, which people mistook for what it is so different from, was for its *own sake*, and, I will add, with the hope of being useful to a country of which I was proud and felt honored to serve. My *immense labor* for the *Southern*

Review—which they saddled me with as if it had been an hereditary estate—do you think I went through so many nights (*summer* nights, too,) of watching and toil because I hoped to be spoken of with some terms of compliment in our own newspapers, or even by foreigners? If so, why don't I write *now* when pressed to do so? No! no! I thought I could help to show that people did not know what our *Race* was. I felt in speaking its language, I should be thought eloquent—and I have not been mistaken. But I wrote especially as *a Carolinian;* and now I fear "Othello's occupation's gone!" . . . . At all events, I shall return in the fall, certainly with a heavy heart, *and almost despairing of all I ever wished to see realized*, but with a determination to do what I can to make myself useful—if it be possible!' This gallant resolve, to make himself useful, Legaré had the opportunity of executing almost immediately upon his arrival home. He was put in nomination, and readily elected a representative in Congress from Charleston, for the term commencing with the first year of Mr. Van Buren's administration.

The brief interval before he was called upon to attend to his new duties at Washington, was passed by Legaré in the society of his family and friends. Everybody perceived that four additional years abroad had matured his character, his knowledge, and his genius. There was hardly any position in Law, or Politics, which it was not generally confessed that he might now justly aspire to, and perhaps at some future period attain.

In the month of September he took his seat in Congress. It was an *extra* session, convened to discuss and provide for a terrible financial crisis. Legaré took a prominent part in the debates. His principal speech, on 'The Spirit of the Sub-Treasury,' was a magnificent effort. It astonished the House, and dazzled the country. Far better than this—its deep, philosophical, statesmanlike views arrested the attention of thoughtful capitalists, and men in power. Legaré had at once made his mark. The shrewdest of financiers acknowledged they could learn something from him. On sundry other questions in this Congress, Legaré spoke, and, of course, always with distinguished ability. An *extempore* address of his, on

the 'Admission of Hayti,' is remarkable, not merely as showing his alertness of resource and argument, but the prescient wisdom which foresaw, from the beginning, all the dreadful consequences of abolition agitation. He spoke like a prophet to whom the Future had become as the Present. It is disgusting to know that, despite his well-earned fame, Legaré, by the trickeries of party coalition, was thrown out at the next election, and in the very morning of what promised to be an unparalleled legislative career, was constrained to retire from political life.[4]

Apparently in no wise discouraged, he now devoted every energy to his profession. Cases poured in upon him. Among these was one known in the books as the case of 'Pell and Wife *vs.* the Executors of Ball.' The circumstances were peculiar. A Miss Channing, daughter of a Boston merchant, Walter Channing, 'had married a Mr. Ball of South Carolina, and brought him a large fortune *without any settlement.* By his will, Mr. Ball bequeathed to his wife all of this fortune. Embarking at Charleston for a visit North, on board the ill-fated steamer, *Pulaski*, which blew up at sea, they both perished in that catastrophe. The question in the cause was, Which survived the other? If Mrs. Ball, then the legacy vested in her, and was transmissible to her sisters; if her husband, then the legacy had lapsed, and fell into the residue of the estate, and went to his family.'

Legaré represented the interest of Mrs. Ball's *sisters.* His opponents stoutly maintained that, according to every law of *probability*, the husband, being the stronger person, was, *therefore*, the survivor; an argument which Legaré combatted by declaring, that *positive testimony* must always override *presumptions.* After the accident, Mrs. Ball had been remarked flying about the boat, and her voice was distinctly heard calling on her husband. Here was a single striking dramatic fact, and Legaré seizing upon it, conjured up the whole awful scene with a force and vividness, which, an eye-witness tells us, thrilled

[4] 'At a public dinner,' says Mr. Alfred Huger, Legaré's contemporary and friend, 'when Legaré had just been *defeated* in his second election for Congress, his eloquence was truly majestic, though he never uttered a syllable of himself! Many present might properly have remembered the condemnation of Socrates, and the subsequent repentance of the Athenians; and some muttered to themselves that the assaults upon Coriolanus were impolitic and unwise!'

the court and audience as he never had seen men thrilled before. Moreover, the incident of the frantic woman calling upon her natural protector, was converted into an *argument*, (sent home to the minds of the jury by the power of irresistible pathos,) that the husband thus fruitlessly summoned, was already dead.[5] 'Upon the narrow theatre,' said the speaker, 'of that shattered deck, was enacted a scene to paint which, all that imagination or poetry could invent, of the most pathetic, must fail. She called upon her husband, upon whom she had never before called in vain—upon whose arm she had ever leaned in danger—her stay, her refuge! She called, but he never answered; no, Sir; he was *dead!* DEAD! DEAD!' These three last words are said to have been uttered in tones so deep, mournful, and solemn, so assured of the truth they asserted, that conviction was carried instantaneously to the minds of the hearers. Legaré's clients gained their suit. Several other cases of great importance were argued by him about this time, especially the well-remembered case of *Cruger vs. Daniel*, in which his skill and learning, as regarded the intricate clues of the law of real estate, were conspicuously proved.

And now, the great political canvass of 1840 was at hand. With an ardor he had seldom, if ever, exhibited on any former political occasion, Legaré threw himself into the controversy. In the theatre at Richmond he delivered a popular harangue, which unprejudiced judges, comparing with a speech delivered about the same period, and at the same place, by Webster, declared it to be by far the ablest of the two. In Baltimore and New York, also, he addressed large and enthusiastic crowds. His speech in the latter city was mentioned by the democratic press as an effort of singular vigor and eloquence. Superlatives were exhausted in describing it.

President Harrison died only a month after he had taken the oath of office; and, a few months later, the Cabinet he had gathered about him resigned. This led to the selection of

[5] 'His efforts as a public speaker,' remarks Mr. Huger in the communication just quoted from, 'were like the flight of an eagle, or the murmuring of a dove. 'I have seen him (to change the figure) when he acted the cataract without knowing it, and again, when the "deep still water" ran over at his eyes, as though his nature dealt only in the softest emotions of a woman. In the case of Pell *vs.* Ball, his eloquence ceased to be touching only to become sublime!'

Legaré as Attorney-General of the United States. 'It was precisely the position,' says Preston, 'for which he was most ambitious.' He was thoroughly qualified for all its duties, and consequently his success was perfect. Bench and Bar awarded him the palm of exalted merit. In September, 1841, he took office. In the ensuing January the Supreme Court met. Besides two or three *private* causes of moment, Legaré argued, during this term, no less than *eight cases* on behalf of the United States, most of which he gained.

In 1842, the famous case of *Jewell vs. Jewell*, came up for decision. It turned upon the question, What was the law of marriage in the United States. So vital were the issues involved, that Legaré elaborated his points with scrupulous care, even taking the trouble to send as far as Vienna for *Eichhorn's Kirchenrechts*. In profundity of legal research, in elevation of sentiment and social views, many, familiar with his professional course, deemed this argument his *chef d'œuvre*. Unfortunately, it was not reported.

All who have studied our history, must remember how unpopular was the administration of Mr. Tyler. It seemed to have the Upas power of blighting every reputation which approached its shadow. Legaré *alone* lost nothing by his association with it. On the contrary, his fame steadily increased. The President, in the midst of his distracting cares, learned to rely upon his Attorney-General for counsel and assistance. These were always frankly given; and thus, a friendship was gradually established between them. Upon the withdrawal of Webster from the Cabinet, the duties of the State Department were confided to Legaré *ad interim*. He showed his diplomatic skill by conducting to a successful conclusion the Ashburton Treaty, or, at least, that portion of it relating to the long vexed and dangerous question of the Right of Search. But the labors of this department, added to his own professional cares, were, indeed, toils of Hercules. The effect was to undermine insidiously his physical strength.

While staggering under this load of work, he had the misfortune to lose, in quick succession, his favorite sister and his mother. The latter calamity almost broke his heart. As if to

distract his attention from domestic griefs, he now plunged with three-fold assiduity into public business. But the end was nearer than he dreamed. A few steps more along the upward path of honor, and he must meet,

> 'That SHADOW cloaked from head to foot,
> Who bears the keys of all the Creeds.'

It sometimes happens, that in men of iron nerves, of the most vigorous physique, and athletic muscular development, there lie *perdu* the seeds of organic weakness or disease, which, stimulated by circumstances into action, result in sudden, unexpected dissolution. Thus it was with Legaré. Notwithstanding his prodigious powers of endurance, there was *something* wrong—some deranged, feeble, or diseased spring in his constitutional mechanism, which might at any moment give way, and consign the whole fine structure to dust and ruin. Dimly, at times, he suspected this himself.

On the 16th of June, 1843, Legaré visited Boston in company with the President, to participate in the Bunker Hill Celebration. On the very day of his arrival, he was prostrated by an attack of what the doctors termed 'visceral derangement.' The 17th still found him ill, and in bed. Of course, the best medical aid was summoned. But no science could save him. He rapidly grew worse, suffering tortures with heroic fortitude. Meanwhile, he had been removed from a hotel to the residence of his old friend, Professor George Ticknor of Harvard University. There he received the most devoted attentions. All in vain, for his hour had struck. On the 19th, his case was pronounced a hopeless one, and at five o'clock on the morning of the 20th, this illustrious Statesman, accomplished Scholar, and true Gentleman, breathed his last. He had met the end with a noble resignation. In the final moments, his thoughts wandered to his home in Carolina. The last whispered word that was audible, referred to an only surviving sister living there. The agonies of his disease ceased some hours before dissolution. He died in Mr. Ticknor's arms, so calmly, that those around him could hardly realize that his great soul had fled.

When the news of his death was spread abroad, it is no

exaggeration to say, that the event was looked on as a *National* misfortune. Few, however, even then, possessed the means, or capacity, rightly to estimate his talents. A combination of intellectual faculties at once the most brilliant and the most profound, cultivated, strengthened, and made practically efficient, by a course of systematic discipline within the reach of few, placed Legaré alone among his contemporaries. More and more, as we have studied his writings and speeches, and marked the steady unfolding of his powers, has the conviction possessed us that his was a genius of the first order. With the wings and vision of the Poet, he was endowed with the logical penetration of the Philosopher. Reason and imagination, in perfect fusion, worked together in all his great mental displays towards a recognized and certain end. The lowest details, and the loftiest generalizations, were alike within his grasp. His mind resembled, as Macaulay has said of Elizabeth's illustrious Chancellor, that tent which the Fairy Paribanou gave to Prince Ahmed: '*Fold* it, and it was a toy fit for the hand of a lady; *spread* it, and armies of powerful Sultans might repose beneath its shade.'

More than a quarter of a century has elapsed since Legaré was gathered to his fathers. During that long period, but a single edition of his works—that at the head of this article—has been presented to the public. This, consisting of *two* cumbrous volumes, must be characterized as simply *execrable!*—execrable in general arrangement; execrable in print and binding; execrable in the style of annotation; and, worst of all, most imperfect. Its sole merit (apart from the fact that, however imperfect, it *is* the only edition, and so far beyond price,) consists in the voluminous and appreciative Biography, to which we are mainly indebted for the materials of our sketch. Yet, we never take the disjointed volumes in hand, without involuntarily regarding them as a species of sepulchre in which the bright genius of Legaré lies buried! Are his precious remains, the fruits of *such* labor and talent, never to be shrined becomingly?

The attempt, we know, *has been* made, to interest the Southern public in a new and complete edition of Legaré's works,

but it miserably failed. The South, it seems, has been but too apt to turn coldly from the graves of those who, by exceptional endowments, extorted her admiration in life. This has been the suicidal policy of her opulent and prosperous Past; is it likely that, down-trodden and ruined, she will manifest a more liberal spirit in the Future? Yet, the very *extremity* of her condition, political and social, should lead her to reflect, that *now* there is but *one* heritage of which fraud, violence, and rapine, cannot deprive her—the heritage of her illustrious *dead*. Ought she not, then, with a sacred and reverential gratitude, to cherish their memories, exalt their fame, and preserve whatever of grand and beautiful in thought has been left to her in solemn trust? so that if indeed, as Legaré mournfully predicted, there is nothing before her but accumulated decay, and a lower downfall, she may still point to the products of her children's labor and genius, so embodied, and brought within the reach of universal recognition, that all may read, and the bitterest of her foes be constrained to acknowledge of her Past, that 'there were giants in those days.'

We close with Mr. Huger's testimony in reference to the fascination of Legaré's manners in private life, his conversational powers, &c., &c.:

'In private life, I was very much with him—oft-times to meet the demands of society—frequently to indulge our individual friendship; and when absent, our correspondence was large, including always, the most important points of the times in which he lived; *that* correspondence, like other matters, which might be interesting now, has met the fortune of war and been destroyed.

'There was another atmosphere in which Legaré was truly brilliant. In conversation, he surpassed himself, holding way with the strongest of his day and generation. No intellectual entertainment was properly organized without him; and however sumptuous the repast, when the viands were removed, there were sure to be a feast far richer than the first. Petigru, William Washington, and himself, made the *dramatis personae;* or, if he met Preston, it was "all light," with more "flashes," but never less profound. It was common for me to meet him

at the table of my kinsman, (who adopted me as a younger brother,) Judge Huger, when the company consisted of such men as the host, Judge King, Mr. Poinsett, William Washington, James R. Pringle, Colonel Drayton, always Mr. Petigru. They were all excellent talkers; (particularly Washington;) and in their sentiments of honour, and in their manners of elegance, had succeeded the men of the Revolution. Legaré was younger in years than any of us, but certainly not so in learning, or in knowledge, or observation. I often told him, that by far the best part of my own education was derived from these meetings, and from my midnight *tête-à-tête* interviews with Petigru and himself; they had carried on wholesale operations in books and in study. I always benefitted by the "retail business" which they occasionally dealt in. Legaré was *not* always cheerful; very susceptible of what he considered rude or discourteous; sensitive about his personal appearance and want of stature—like Byron about his foot—which no one but himself ever noticed or thought of; for no one could look at the beaming of his countenance, without seeing the force of intellect and of power; and no one could listen to him without being conscious of the presence of both. He delighted in his intercourse with women of the highest order of refinement, acquirement, and of mind, always giving of each more than he received, but always gentle, affectionate, and kind.'

ART. VII.—1. *Cotton Culture and the South*, considered with reference to Emigration. By F. W. Loring and C. F. Atkinson. Boston: A. Williams & Co. 1869.

2. *The Cotton Trade.* By Ellison. London. 1857.

3. *The London Economist*, of August 25, and December 6, 1862.

A land may teem with products, and yet, being without a ready, profitable market, will nevertheless remain poor, unthrifty, and dependent, unless, indeed, there should be found some other more favorable and remunerative channel into which its industry may be turned. This might be abundantly illustrated. We have seen great quantities of the best description of potatoes left to rot in the fields of California, because they could not be sent to market without downright loss; and corn has been burned in Illinois, more than one season, as fuel, for the reason that it was cheaper than wood or coal! But a people possessed of a broad, bounteous domain, yielding staples which the civilized world must have—staples that enter freely, to an almost unlimited extent, into all the great avenues of commerce, and give employment, directly or indirectly, to general industry—that people, on the other hand, have within their control the certain elements of wealth and prosperity. Two such staples have been at the command of the United States since the opening of the century, and to this fact may be ascribed the extraordinary development, and the wondrous general welfare to which it had attained at the beginning of 1860. These staples, we must add, are grown, the one exclusively, and the other mostly, within the borders of the Southern States, including Kentucky, Maryland, and Missouri. We refer, of course, to cotton and tobacco.

From 1821 to 1860 inclusive, the total value of domestic exports from the United States, exclusive of the precious metals, is officially estimated at $5,311,000,000. This is the grand aggregate result of the production of the whole country

which, not needed at home for the forty years immediately preceding the war, was spared to commerce and trade with foreign lands. This was the portion of our industry that we have had to give in exchange for all the comforts, the luxuries, and the necessaries of life, which this people have meanwhile imported from abroad, and upon which have been levied custom duties sufficient to defray almost the whole expense of our National Government up to April, 1861. Of this aggregate of $5,311,000,000, no less than $3,067,087,127, or *fifty-eight per centum*, accrued from the two staples we have mentioned, together with one other, rice, also a Southern product. Furthermore, one of these staples, as it left our ports in the raw state, was worth within a small fraction of the total value of all the remainder of the exported products of the country.[1] That is to say, cotton has been the main contribution of the United States to the commerce of the world,—the one exportable product of our soil which has played so imperial and beneficent a part in the industry and progress of the century.

Under these circumstances, some observations touching the growth and character of this plant, and the present and future of its culture at home and elsewhere, will surely not be amiss, or without special interest. The geographical range of cotton is, unquestionably, a wide one; a zone of the earth, limited, according to Humboldt, by the fortieth degrees of north and south latitude, within which it grows, to greater or less extent, according to the character of the soil and the favorableness of the climate. It is a perennial, and becomes a tree, in some quarters of the globe; elsewhere, as in Brazil, it is a triennial; but, generally, it is an annual, as in this country. In certain literary circles—both English and American—we have seen frequent allusions to the cotton tree found in Africa and South America, as a happy gift of Nature to man—like that of Athênê, of the olive tree to the Greeks—and of special moment in the future of the cotton trade. These writers evidently fancy that a cotton-producing *tree* must be peculiarly valuable,

[1] This is exclusive of the value of the raw material—or sixty per centum—in cotton goods manufactured and exported for the same period, which, of course, should be added to the value of cotton produced and exported. The value of the raw cotton used in domestic manufactures in 1860, was fully $69,000,000.

and the country possessing it, *par excellence* the best of cotton fields. Yet the fact is otherwise; for the perennial plant, if not altogether worthless for commercial purposes, is the least valuable, and the annual plant the most valuable, of all the varieties.

It is climate, far more than soil, which affects cotton culture. It matters little, indeed, that the soil is favorable, unless the climate prove genial, and free from sudden vicissitudes, or from extremes either of heat or cold, dryness or moisture. Wide as the zone is within which cotton will grow, no other fields upon the face of the globe have anything like the sum of advantages possessed by those of the cotton region of the United States. It is a peculiarity of the climate of this country, says Blodget in his work on Meteorology, 'to ripen all products speedily, and to develop the nutritive elements profusely.' Now, this happens to be a quality of prime importance in the growth of cotton; for the shorter the season of production from germ to mature fruitage, the larger the harvest. In fact, the climate of our Southern States is almost all that could be desired; and a beneficent Nature seems to have designed them for the chief seat of cotton culture in the world. The Gulf Stream, with its bland temperature, charges the atmosphere, borne landward, with the proper and regular degree of moisture, which is distributed over a wide area at propitious junctures; a vast network of rivers, with numerous affluents, large and small, penetrate the whole cotton region, supply moisture to the parched fields in mid-summer, and obviate, at times, the want of rains; while, at others, they serve as natural drains to carr yoff the surplus water and moisture in the soil. The result is a staple the like of which, as we shall see, does not grow, and cannot be made to grow, elsewhere, even from American seed.[2]

Before the war, from six to six and a half millions of acres were under cotton cultivation in the South, with an average product of about five hundred and thirty pounds of uncleaned cotton to the acre.[3] But that area constituted only

[2] The mean temperature of this region ranges from 55° at Lebanon, Tenn., to 70° in Florida; the average does not exceed 60°.

[3] One thousand pounds of seed cotton will yield from four to five hundred pounds of clean cotton.

a small portion of the cotton lands of the country. Texas alone has ten millions of acres of the best description; Alabama six millions; Mississippi quite as many, and Georgia three millions of acres. This immense scope of land, made readily accessible to market either by navigable streams or railways, would seem to insure the perpetuity of our supremacy as cotton producers; unless, unfortunately, untoward complications in the question of labor, and of the future political status of the cotton section, shall so paralyze the people that their fields cannot be properly tilled. Already the number of acres under cotton cultivation has been so sadly narrowed, that we now scarcely produce one bale where we produced three in 1859 and 1860. Should the causes which have wrought this injury, unhappily continue unabated, they may readily and substantially result in the destruction of the cotton culture in the United States; and in the loss to American commerce of some $250,000,000 of exports annually, and of about $125,000,000 accruing yearly from domestic cotton manufactures in the country. This supremacy of American cotton in the marts of Europe has, from the outset, been endured with the keenest dissatisfaction by the statesmen, capitalists, and manufacturers of England. Sparing no effort, they have lavished both public and corporate treasure to escape from it as from an odious commercial bondage; and never were these efforts so earnest, so wide spread, and so effective as during the war. It is important to this country, to all its business and commercial interests, to know precisely what success has crowned these unceasing, costly struggles for the provision of other sources of cotton supply than those of the Southern States; or what possible success may be reasonably anticipated in the future.

India is the chief source, next to the United States, from which the mills of Great Britain draw their supplies of raw cotton. More than two thousand years ago, it is known that cotton was grown and manufactured there into fabrics, in which the whole population were clad; and at this day it is estimated that there are one hundred and fifty millions of the people of India,[4] who, each, consume, on an average, twenty pounds of

[4] Mr. J. W. B. Money, of Calcutta, a writer on cotton questions, highly regarded by the London *Economist*, places the population at 180,000,000.

every crop; for not only are their clothing, but also their beds, pillows, and bed clothing, ropes, carpets, and house drapery, of cotton. This, of itself, swallows up far more cotton than was produced in the United States even in 1860. Of late years, possibly, this may have been somewhat diminished, as coarse British fabrics have probably supplanted the native cloth to some appreciable extent.[5]

Cotton was first imported from India to England as early as 1783, but to an insignificant extent, until about the opening of this century. Stimulated by the lavish use of the vast appliances and resources of the East India Company, the annual importation was then raised to six million pounds. Machinery and American seed were now introduced, and planters, likewise, to instruct the natives. Government subsidies were granted without stint, with the aim of a further development of the India cotton supply; and with such results, that between 1811 and 1821 the annual average exportation to England was twenty-four million pounds. In the next ten years, however, it fell off to eighteen millions. But the British Government and India Company renewing their efforts, so increased their expenditures, that between 1831 and 1841, the annual average exportation rose to forty-seven millions, and by 1851, to one hundred and fifty-six million nine hundred and eighty-one thousand eight hundred and thirty-three pounds; and this was largely augmented by 1860.

During the war, as all know, the price of raw cotton rose about four hundred per centum in consequence of the dearth of the American staple. This, of course, led to increased exportations from those countries which had been unable to compete with the superior cotton supplied by the Southern States; and foremost among them was India. The extraordinary prices tempted the natives to sell cotton which they had been wont to use at home; doubtless, moreover, it made them, for the time, abandon the culture of hemp, jute, and indigo, (if not breadstuffs,) which, until then, had been more remuner-

[5] Major-General Briggs, of the British Army, estimates that 750,000,000 pounds are annually consumed for clothing exclusively. Doctor J. Forbes Royle places the total native consumption at twenty pounds per soul. In the Bombay Presidency, about 62,500,000 pounds are annually manufactured into a coarse cloth by the natives.

ative than cotton. Hence, the exportations to England from her India possessions, in 1862, were one million one hundred and sixty-nine thousand three hundred and ninety bales; in 1863, one million two hundred and thirty thousand nine hundred; in 1864, one million three hundred and ninety-nine thousand three hundred and fourteen; in 1865, one million two hundred and sixty-six thousand; and in 1866, one million eight hundred and forty-eight thousand bales; for by that time all the elements set to work during the war to stimulate cotton production and exportation, had come into full play and wrought the largest possible results. The high prices still ruling attracted this large amount of the India staple to the English market, notwithstanding the reappearance there of the superior American cotton to the extent of one million one hundred and sixty-two thousand seven hundred and forty-five of the much larger American bales. That all this India cotton was 'taken up' and consumed in 1866, by the British manufacturers, we cannot believe; large quantities of it must have lain over for some time in warehouses, as it could not compete with the American staple. In fact, the importation by Great Britain, this same year (1866) of cotton from all sources, reached the high figure of three million seven hundred and forty-nine thousand and forty-one bales, averaging three hundred and sixty-two pounds; that is to say, some three hundred and seventy-two thousand five hundred and seventy bales more than in 1860, the largest previous importation, but really seventy-eight million eight hundred and fifty thousand pounds less in weight.[6]

It is true, India is watered by the Ganges, the Indus, and several other large rivers, but these do not supply so generally distributed a system of natural irrigation as that formed by the innumerable water courses of the Southern Cotton States, above mentioned. As we have observed, cotton requires a peculiar, favorable combination of warmth and moisture for its profitable growth. This is wanting in India to a highly prejudicial degree. The climate there is essentially capricious. The earth,

[6] In 1860, about seventy-five per cent. of the importation were of the large bales of the Southern States; in 1866, only thirty-three and a third per cent. were from the same source; hence the difference in average weight of bales.

at one season, is drenched with tropical rains, sometimes falling as heavily as twenty-four inches in a night, and thirty inches for four or five successive days, and then burned up by a torrid sun. The seasons are short—of three months—with sudden transitions from extreme dryness to excessive moisture, from fervid heat to a perceptible chill.[7] The Presidencies of Bombay and Madras have proved most favorable; yet there, for more than nine months of the year, the heat, under a vertical sun, is so intense that almost all vegetation is scorched and shriveled up; the earth becomes seamed with great yawning fissures, and the calcined soil is left as dry as powder.

The only possible remedy is artificial irrigation; therefore large sums have been, and are still being, expended to that end. In the latest India Budget we have seen—that for 1867–8—£420,500, or about $2,102,500 were called for in connection with irrigation and embankments, with an estimate for 1868–9, of nearly as much again, or £827,000, that is, $4,135,000. But, after all, irrigation is only a palliation, not a cure. Indisputably, it secures cotton culture, in India, from some of the hurtful effects of the extreme heat of that climate; to that extent it has been, and will be, of considerable advantage. But it is no relief, of course, from the ills of excessive moisture at certain seasons. It is liable, also, to some radical objections; among others, that it materially changes the character of the plant, transforming it from an annual into a triennial, and, as far as we can ascertain, has effected no sensible improvement in the quality of the fibre; as is quite apparent from the fact that, to-day, the great mass of India cotton sells as much below that of the United States, in the market of Liverpool, as it did in 1860. This is further apparent, inasmuch as the demand for American cotton, immediately upon the close of the war, was re-established upon its old footing; that is, with the old discrimination in its favor, and with the eager demand for it as of old.

Planting in India, beginning in June, is prolonged to August, or until the rain begins to fall. Ripe in February, the picking lingers on as late as April; for it so happens, that the

[7] *Vide* Dr. Royle's work on India Textile Products.

food crops of the people mature, and have to be harvested and garnered at the same season. The labor for this has necessarily to be diverted from the cotton fields, and a large quantity of cotton wool falling to the ground, is either wasted, or gathered in that notably foul condition of Surrat's cotton, which causes the waste on it in the hands of the manufacturer;—'ten per cent.,' says Mr. Money, 'more than upon our cotton.' Furthermore, the India staple requires more manipulation in manufacture; and, in spinning, the machinery has to be run at a much lower speed than with the American. This, of course, materially enhances the cost of manufacturing it.[8] In his articles in the *Economist*, Mr. Money writes in behalf of more effective efforts than have yet been made to improve cotton culture in India, where he resides. Nevertheless, he admits, that it takes six acres of land in that country to produce a bale (380 pounds) of clean cotton, or that the average growth per acre is not over sixty pounds.[9] And, moreover, that this can only be done, on the same land, once in three years. Grown under so many deleterious influences, the fibre is coarse and short. Ellison, another high English authority, touching the cotton trade and production, confesses that 'India is unable to supply the *quality* of cotton that will equal, or even *approximate* to, that of the United States,' notwithstanding the sedulous efforts and unstinted expenditures made to improve its quality.[10] This has been likewise admitted in effect by the *Economist* of later date, as well as that all the costly cotton farms established in India by the Government, or the India Company, have failed of substantial results.

Brazil produces a staple the nearest in quality to that of the Southern States, and is the third, in extent, of the sources of cotton supply. The difference in the Liverpool market between Brazilian and New Orleans 'middling,' is about *two pence* per pound in favor of the latter. Certain influences, which made the production of cotton much less profitable than that of sugar, coffee, or mandioca, for some years before the war, had gradually lessened the growth and exportation of cotton; so that

[8] London Economist, Dec. 6th, 1862. [9] Ibid., Aug. 25th, 1862.

[10] Ellison on the Cotton Trade. London. 1857.

for the ten years ending with 1860, the average exportation to England did not exceed one hundred and thirty-five thousand bales of about one hundred and seventy-four pounds, or equivalent in weight to not more than fifty thousand bales of Southern cotton.

Toward the close of the war, the high price of cotton had the effect, however, to revive cotton culture in that empire to such extent that, in 1864, some two hundred and twelve thousand one hundred and ninety-two bales (one hundred and seventy-four pounds each) were exported to Great Britain; three hundred and forty thousand in 1865; four hundred and seven thousand in 1866; and four hundred thousand bales in 1867; that is to say, an annual exportation for that period equivalent in pounds to only about one hundred and thirty-one thousand three hundred and eighty-seven bales of the Southern staple.

We have alleged that certain influences had gradually lessened the production of cotton in Brazil previous to 1861. Those influences were, first, climate, which, in no respect, is so favorable as in the cotton region of the United States. Near the sea-shore the plant does not thrive as in the United States and Egypt. The north-west trade winds reach the land surcharged with moisture gathered up from the broad expanse of intertropical seas over which they have blown, and have a high '*dew point;*' hence the deposition of heavy rains and so excessive a moisture, as to stimulate the overgrowth of wood and leaf, at the expense of the pod and wool. Cotton culture, therefore, was driven away from the coast to the interior, involving the serious drawback of difficult, costly transportation; one that must prove well nigh an insuperable barrier to any very extensive cotton culture in that country. Heavy rain-falls are also apt to come at the time the cotton has ripened, as in India, and with the same injurious effects. Some idea of this rain difficulty may be formed from the fact that, in 1842, the fall at Pernambuco was 109.27 inches, and it rained one hundred and twenty-four days and one hundred and thirty nights in the year. As we know, the land, water, and air of Brazil teem with life, and the earth and air, as might be expected, are full of worms and insects, which are special enemies of the cotton plant.

Cotton in Brazil, we should mention, is a triennial with little wool the first year, but yielding the maximum the second year. After the third year, the plant is cut down, and the land has to be changed to some other tilth, as it will not stand another planting of cotton. These are grave, material disadvantages in any effective competition with the staple of the South; for, in the first place, it takes two years in Brazil to do what is done in the Southern States in one. Or, in other words, only two crops are matured on the same land in three years. Thus it has happened, that Brazilian planters have sought other and more profitable staples—such as sugar, coffee, and mandioca, less bulky than cotton, and not so much affected by the cost and hindrances of transportation. Hence also, was it that even during the blockade, there was at no time as much of Brazilian cotton in the English market as from the Confederate States; and hence, in 1866, the amount of Southern cotton used by the mills of Great Britain, was worth eight times as many pounds sterling as that consumed of Brazilian growth.

Egypt comes next upon the list as a cotton producer. In 1854, she exported sixty-two thousand six hundred and fifty-two bales to England, and in 1859–60, ninety-three thousand one hundred and four bales, about the size of those from the United States. This cotton is of excellent quality, commanding a ready sale. Of course the blockade, the scarcity of American cotton in Europe, and consequent high prices, had its stimulating effect in Egypt as in India and Brazil. We, therefore, find her exporting to England one hundred and thirty-two thousand seven hundred and fifty bales in 1861–2, (with a total exportation the same year of one hundred and fifty-two thousand three hundred and seventy bales,) in 1862–3, two hundred and four thousand two hundred and seventy bales; in 1863–4, two hundred and fifty-seven thousand one hundred and two bales; and in 1864–5, three hundred and thirty-four thousand bales. This, however, she did not maintain; for the exportation to England in 1866, was only one hundred and sixty-seven thousand bales, with two hundred and eighty thousand in 1867. Soil and climate are favorable enough in Egypt, especially for the Sea Island variety; but it only needs a glance at a school

atlas to show that she has too small a scope of arable land—a mere narrow strip along the Nile, for four or five hundred miles—ever to become a great and reliable source of cotton supply. Within ten years, the greater part of the cotton grown there was brought to maturity by hand irrigation, by water carried in buckets from the Nile; but now, steam pumps are used, and all other possible ways of raising water. With an advance of three hundred per centum on the Egyptian staple, during the war, her production for exportation at no time exceeded three hundred and fifty thousand bales,[11] and for the three years immediately following the close of the war, has fallen to an annual average of two hundred and sixty thousand bales. Meanwhile, the Southern States, under all possible disadvantages, political, industrial, and domestic, have furnished the mills of England with three and a half times as much as Egypt. Other sources have not passed untried by the manufacturers of Great Britain. Turkey, China, and the West Indies, were gleaned to an aggregate amount of three hundred and fifty-three thousand small bales, in 1865; in weight equal to two hundred and sixteen thousand bales of Southern cotton.[12] There are other countries where cotton grows, or may be made to grow, to some extent; indeed, many countries. At one time, high hopes were entertained of Algeria and Australia; and Africa was presently to become a boundless, bounteous, cotton field for the uses of Manchester. In Algeria, a serious effort was made, in fact, by the French Government to give vitality to cotton culture there; and for a season or two there were some results. But inexorable obstacles were soon apparent. The climate proved utterly unpropitious; so that fair crops could only be accidental, and failure almost inevitable. The wet season lingers so long in the lap of spring, that the seed, necessarily planted in deeply sodden soil, decay to so

[11] This, too, we learn from the *Revue des deux Mondes*, was effected by the sacrifice of all other agriculture, so that a fearful famine resulted. To supply cotton all else was put aside; there were no cereals, no vegetables, no forage grown; six hundred thousand cattle perished for the want of water and food, as all the water resources were absorbed in the irrigation of cotton. There was, therefore, also no meat, and the small proprietors were ruined. In fact, cotton culture proved the bane of Egypt.

[12] We have no doubt that the greater part of the one hundred and thirty-one thousand bales reported in 1865, as from the West Indies, was really cotton grown in the Confederate States.

great an extent, that comparatively few germinate. This season of moisture is followed by one of rainless skies, unflecked by a cloud, and glaring with a sunshine which, gradually growing more and more ardent, finally falls directly from the zenith, as if reflected from a dome of metal, and, as in India, baking the earth, pulverizes the soil to ashes, below the roots of the few plants that have come to life. Nor is this all. About the time those plants which have survived the drouth are ripe, and the dwarfed bolls begin to open, the season has returned for torrential showers, which, falling as if emptied from the glowing heavens, dash the fibre to the ground. The staples found best adapted, however, to possible growth, are the Sea Island, and the Nankin or yellow cotton. American seed, procured through the French Consul at Charleston, was thoroughly tried; but its deterioration was so rapid as to make an annual supply necessary; and, for all commercial purposes, cotton culture has, says the *Revue des deux Mondes*, been given up in Algeria as a *nullity*.

In Australia, likewise, some effort was made to inaugurate cotton culture. The London *Economist* regards both soil and climate as highly favorable; but asserts that the want of labor there places that region 'out of the question' as a cotton field. We have good reasons to differ with the *Economist*, as to the fitness of the soil, which is altogether too thin for cotton, and is far better adapted to pastoral uses. It wears out so rapidly, that, as is stated on good authority, one potato crop so exhausts it, as to make rest necessary.

As for Africa, if ever cotton culture could be developed there, and made available to commerce, this would have been done during our intestine troubles; and yet, not one pound appears in any of the Reports, as imported from any part of Africa save Egypt. The climate of Greece is thought also to be favorable, but the soil is acknowledged to be much too poor for the profitable tillage of cotton. American seed have been tried, but deteriorated so speedily as to be valueless. In Mexico, Cortez found the natives chiefly clad in cotton, in the manufacture of which, they had attained rare skill. Yet Mexico has given no promise, at all, of ever becoming a productive cotton region; though the cotton tree flourishes there.

We have thus reviewed the whole cotton zone of the earth; we have examined the extent of each possible source of supply, and seen to what extreme degree of stimulus cotton production has been subjected by the high prices resulting from the great sectional war in this country; we have seen, too, how inconsiderable and transient the result, and that Southern cotton has not really lost its empire over the marts of the world. If this has not been achieved, however, to cite the language of the *Revue des deux Mondes*, 'it was not for want of the utmost exertions. Everywhere that the climate and soil permitted the trial, it was made with a *feverish ardor to produce as much as had been supplied by the United States.*' Before the war, the *percentage* of Southern cotton used in Great Britain, was seventy-five; all that the *Economist* claims since the war, is a reduction of ten per cent., leaving us still sixty-five per cent.

It has been asserted, and is currently believed, in England and in the North, that industrial necessities led to improved machinery, by which the short fibre of India may be profitably spun. We have sought for evidence of this, but found none; we have found strong circumstantial evidence, however, to the contrary. This is seen in the admission, that it requires more persons, and a slower speed of machinery, in the spinning of Surrat's than Southern cotton. This, too, is apparent to us, in the previously cited fact, that though there was nearly as much cotton, including this mass of short staples, in England in 1866 as in 1860, yet high prices were maintained, though the demand and actual weekly consumption was three thousand bales less than in 1860, and much less than the supply. In 1860, three-fourths of this cotton was of Southern production; in 1866, only a third in bales, or forty per cent. in weight. Had this alleged improved spinning machinery been in actual operation, then, indisputably, short-fibre cotton would have been used rather than the more costly American staple. The weekly issues, however, were but forty-six thousand eight hundred and eighty-five bales;[13] this would give the consumption for the

[13] Total weekly consumption in Europe in 1866, eighty thousand seven hundred and thirty-one bales. The weekly consumption in England in 1860, was fifty thousand six hundred and sixty-five bales; and in all Europe, eighty-three thousand one hundred and nine.

year only some two million five hundred thousand bales; leaving for exportation to the continent, or to remain on hand, fully one and a quarter million of bales. In the absence of direct evidence, we may assume, that it was the American staple which was taken up and consumed as far as it would go, and that the inferior staples remained unconsumed in store. If this were not the case, we are satisfied New Orleans '*middling*,' as we write, would not be quoted at twelve and a half pence in Liverpool, and thirty-four cents per pound in New York; nor would it maintain, as it does, its old superiority in price above the India fibre.[14]

As we have said, for the forty years immediately preceding the war, the United States exported domestic products to the amount of $5,311,000,000, of which $3,067,087,127 were for three Southern products, cotton, rice, and tobacco; leaving only $2,243,912,873 for the other exports of the country. Of this last sum, the Southern States, we may add, are entitled to claim a very large portion also. Of what are known in commerce as 'Naval Stores,' that is, mainly, rosin, tar, pitch, and crude and manufactured turpentine, the exportation has fallen little short of $200,000,000. It so happens, likewise, from causes which we have not the space to explain, that wheat grown southward from the Ohio and the Susquehanna, makes flour which is worth more in our domestic and foreign markets, than that from wheat grown to the northward of those rivers. Nor is this all. Southern flour bears exportation to or through the tropics better than that of the North and West, and hence is chiefly exported to Brazil and other intertropical regions. Thus, therefore, although since 1840, the Southern States have not produced, annually, more than *one-third* of the wheat crops of the country; yet, so far as exportation is concerned, Southern flour has been exported in value very little, if any, below that supplied by the other States. This may also be said in regard to Indian corn. The whole value of 'breadstuffs' exported from 1821 to 1860 inclusive, is stated at $1,101,817,910.

[14] Since writing this article, we have seen a letter from a responsible gentleman, who had lately visited and examined the British cotton mills, without finding any material change in their machinery.

Of which we are justified in claiming for the South fully $400,000,000.[15]

But besides the leading staples, just enumerated, the Southern States have supplied all the brown sugar, and molasses, and well nigh all the hemp, exported, as well as sixty per cent. of the lumber, and thirty-three per cent. of the staves, a fair proportion of the meat, the spirits, refined sugars, wool, and many miscellaneous articles; or, in all, an aggregate of at least $4,000,000,000 of exportation between 1821 and 1861.[16]

While the Southern States have thus contributed the main part of the exportable products of the country, it will be found they have not been relatively behind in the growth of articles for home consumption, or interchange within the Union. The Census returns show that in 1860, domestic cotton goods were manufactured to the amount of $115,000,000, of which sixty per cent. must be reckoned as the value of the raw material, (Southern cotton,) that is, $69,000,000. In like manner, the South produced sixty per cent. of the hemp that year; Kentucky, Virginia, Maryland, Tennessee, Missouri, and Georgia, yielded forty-five per cent. of all the flax; South Carolina and Georgia harvested 187,140,000 pounds of rice; eighty-six per cent. of the whole Tobacco crops grew on Southern soil; Louisiana and Florida produced 302,205 hogsheads of sugar and 12,600,000 gallons of molasses. The Southern States supplied at least forty per cent. of the slaughtered animals of the whole country; Virginia grew five millions of bushels of wheat more than New York, and only one million less than Ohio; and even South Carolina produced one million and a quarter of bushels of that cereal. Of Indian corn the quantity grown was enormous; Tennessee producing more than any other State in the Union, except Illinois. Virginia garnered 10,000,000 of bushels of oats. We might adduce many other articles; but must pause and turn from the prolific products of

[15] Up to 1840, the annual exportation of breadstuffs did not exceed $12,000,000, and Maryland and Virginia were the great wheat States of the country. Even in 1860, Virginia grew 13,000,000 of bushels of wheat.

[16] In 1860, the exportations, exclusive of precious metals, amounted to $315,982,741; of which the Southern States supplied more than $237,000,000, or more than seventy-five per cent.

the soil, to the resources of the same section in domestic animals.

The census returns of 1860, prepared for publication during the war, exhibit the fact that the people of the Southern States owned 2,378,244 horses, and 772,535 mules, a very large number of draught oxen with other cattle in proportion, including 13,402,000 swine in the seven States of Georgia, Mississippi, Missouri, Kentucky, Tennessee, Texas, and Virginia. At the same time, Virginia pastured over one million of sheep; Kentucky, Texas, North Carolina, Alabama, Arkansas, and Georgia, an aggregate of 4,422,000. Indeed, for sheep growing, no land under the sun is so favorable as large parts of Virginia, North and South Carolina, Georgia, and Tennessee.

The subject upon which we have ventured is almost exhaustless; but time and space circumscribe us. We shall, therefore, mention only a few more facts which serve to illustrate the manifest deep seated influence of Southern cotton and other products upon the trade of the United States and of the world:

1. In 1864, the exportations of England to the United States were estimated at about . . $31,000,000
and her importations therefrom at about . . 21,500,000

Balance in favor of England, . . . $9,500,000

But no sooner had the war ended and the productions of the Southern States been thrown once more into the commercial scales, as in 1866, than the case stood thus:

Importations from the United States, . . $154,000,000
Exportations to " " . . 76,000,000

Balance in favor of the United States, . $78,000,000

2. The cotton of the South consumed in Great Britain in 1866, was estimated at $126,250,000, while that of India stood only at $58,500,000.

3. In 1857, $250,000,000 were invested in the machinery and mills for the manufacturing of cotton in Great Britain. And two million of tons of British shipping were employed in the conveyance of the raw material, (three-fourths of which

came from our shores,) and in the subsequent distribution of the fabrics throughout the globe; fabrics estimated to be worth at least $500,000,000. The cotton manufacture scarcely had any existence at the beginning of the century. It is now the great industrial interest of Christendom.

4. Even now, under every possible industrial and political disadvantage, upon which we have no occasion here to dwell, the Southern States are contributing more to the exportation of the country than all the rest of the United States. Omitting exportations directly from Southern ports, such as New Orleans, Mobile, Charleston, and Savannah, and as late as the week ending April 28th, it may be shown that fully *forty-five per cent.* of the exportations from the port of New York, and other Northern ports, consisted of Southern products.

In conclusion, we repeat that no other portion of the globe has ever had a staple with a hold so firm and vital on the commerce, the industry, and the necessities of man, as the cotton of the United States. Every section of the country is equally interested in the promotion of its culture and its permanent supremacy in the markets of the world. Stricken down by the iron hand of war, the industrial resources of our cotton region have been fearfully crippled; so that, on all sides, broad fields which once teemed with the richest products that ever rewarded human labor, are now overrun with weeds, and thorns, and brush-wood. Shall this continue so? Shall these prolific regions, fraught with such incalculable wealth and prosperity to every section of the country alike, remain comparatively unimproved and desolate, for the want of capital and labor to develop their unparalleled resources? Shall not the North and the South, the East and the West, on the contrary, lay aside every feeling of animosity or ill-will, and unite their gigantic efforts to rebuild, and establish on a permanent basis, the fortunes of the New World? Or, in one word, shall they not learn 'wisdom from the things they have suffered,' and, resolutely crushing out the seeds of decay, and desolation, and death, cultivate the germs of life, and growth, and prosperity, till every wilderness made by the war is seen to bud and blossom as the rose?

The answer to this question rests with the people of the dominant sections of the country. The Southern people have, within themselves, all the elements of social regeneration, if only let alone; or if not hampered, and harassed, and baffled, in their efforts to re-establish their fortunes by the interference of the philanthropists of the North. If these men, having eyes to see, would only see what philanthropy really *is*, or what makes for the real good of the land, then, indeed, would every section of the country rise, and sing, and rejoice, in a prosperity and glory never before witnessed on the face of the globe.

ART. VIII.—1. *Smithsonian Report for* 1868.

The volume whose title we have placed at the head of this article is one of the most interesting numbers of the series of which it forms a part. It contains a carefully prepared report of the operations of the Smithsonian Institution during the year 1868, a perusal of which will make the reader acquainted with the honorable part which the learned men of our country are taking in the general advancement of science. The largest and the most valuable portion of the work is, however, devoted to the Appendix. This contains a number of original memoirs and articles upon various branches of physical science, prepared by eminent European Savans, and translated for publication in this report; and for these articles Prof. Henry deserves, and doubtless has, the thanks of thousands of readers in all parts of the country. Among the most interesting articles in this appendix are the following: Tyndall's Lecture on Radiation, delivered in 1865 before the University of Cambridge; Principles of the Mechanical Theory of Heat; Recent Progress in the Science of Heat; and a short Essay on the

Original and Persistent Undulatory Motions of the Particles of Matter.

We have not cited these articles for the purpose of entering into a detailed analysis of their contents. Our object is simply to call attention to the peculiar character of the investigations in which some of the most distinguished physicists of the world have been for many years engaged, and to present in a brief, and, we hope, clear manner, some of the great truths which these investigations have unfolded.

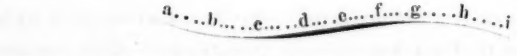
It is well known that in the early days of science, philosophers endeavored to account for the phenomena of light and heat, by supposing them to be material substances of extreme tenuity and devoid of weight. These hypotheses have had their day. Perfectly competent, as they were, to the explanation of a large class of phenomena, they have failed to account for others quite as numerous as those which they served to explain. They have therefore been abandoned, and in their stead have been erected the mechanical or undulatory theories of Light and Heat. The phenomena of undulations or of waving motions, accordingly, occupy a large space in modern physics, and it is to these phenomena, that our attention in this paper will be directed.

In order to obtain a clear notion of what a wave is, it will be well to consider that all *homogeneous*, material bodies are supposed to be made up of exceedingly small particles, called *atoms*, which are incapable of subdivision. Compound bodies are made up of groups of atoms called *molecules*, each molecule consisting of a certain definite number of atoms of its constituent elements. In a homogeneous body, the atoms are supposed to be invested with powers of attraction and repulsion, while in a compound body the same powers are to be attributed to its molecules. In all bodies, whether solids, liquids, or gases, the atoms, or molecules, as the case may be, are capable of a certain amount of motion among themselves, without destroying the particular form of aggregation of the particles. Let us now suppose that we have a body composed of a single row of particles, at equal distances apart, and at rest under the

equal and opposite actions of their forces of attraction and repulsion:

a b c d e f g h i k l m &c., &c. (1)

If, now, the particle *a* be moved from its position by the action of an extraneous force, it will move around its position of equilibrium, returning, after the lapse of a certain time, to its original position. In consequence of the motion of *a*, the equilibrium between *a* and *b* will be destroyed; and were it not for inertia, *b* would begin to move simultaneously with *a*. But as the communication of motion occupies time, *b* will not actually begin to move until *a* has completed a portion of its orbit. In the same manner, after *b* has moved through a certain distance, *c* will begin to move; and so the motion will be propagated through the entire series of particles. It is obvious, that, if by the time *a* has returned to its first position, and is ready to start on a second excursion, the particle *i* has just begun to move, every possible phase of motion will be presented by the particles from *a* to *i;* and if these particles occupy continuous positions, the line which they form will be no longer a straight, but a curved or waving, line, like the following:



The motion of *i* will be communicated to *k*, and so on to the end of the row, and the curve line represented above will evidently be repeated beyond *i* as far as the particles extend. This curve line, *a c e g i*, is a wave; the distance from *a* to *i*, or the distance between any two particles which are in the same phase of oscillation, is the *length of the wave;* and the extent of the oscillation of any particle about its position of equilibrium, is the *amplitude* of the wave.

The preceding illustration will convey an idea of the manner in which a wave is formed and propagated. It may require some slight modification depending upon the nature of the substance in which the wave is produced, but the principal point to be noticed is, that all waves are changes of form in masses produced by small changes of place in particles, and that the

propagation of a wave consists in a continuous advance of the form, and not of the matter, of which it is composed.

It would be instructive to notice here, some of the more remarkable phenomena of waves as they occur in solid, liquid, and gaseous bodies. Of waves in solid bodies, we have familiar instances in the vibrations of strings producing musical sounds, while we have a terrible example in the tremendous earth-waves, which every now and then produce such devastation in the equatorial regions of our continent. Of liquid waves, we have familiar instances in the gentle ripple of the lake, as well as in the great tidal swell, while we have terrible examples in the mighty billows of the ocean when lashed into fury by the raging winds. Of waves in gaseous bodies, we have familiar instances in every gentle sound which falls upon the ear, and terrible examples in the noises of the battle, the yells and shouts of men mad with rage, the rolling of the thunder, and the howling of the tempest.

But interesting as are the phenomena above alluded to, we have not space for a prolonged discussion of them here, and we pass on to the consideration of those particular undulations which occasion the phenomena of light and heat.

In the ninth number of this *Review*, will be found an article on the *Nature and Laws of Light;* giving a clear and satisfactory exposition of the undulatory theory, and of the various phenomena of aberration, interferences, prismatic decomposition, and polarization; and we refer our readers to the article itself for the full details of the theory in question. It is necessary, however, for our present purpose, that we submit a brief summary of the fundamental principles of this theory, and of some of the more important phenomena of which the theory affords a complete scientific explanation.

1. Space is supposed to be filled with an exceedingly subtle substance, which is called the *luminiferous ether.* This ether occupies, not only the appreciable intervals which separate masses of matter from each other, but also the exceedingly small intervals between the atoms and molecules of all material bodies, and each of its particles is capable of oscillating about a fixed position of equilibrium.

2. Light is produced by the undulations of this ether, and each particular color is produced by a wave which has a definite length and amplitude of its own.

3. The velocity with which a wave of light is propagated, is about 186,000 miles per second; and the length of a wave varies, according to color, from one-thirty-four-thousandth to one-seventy-thousandth of an inch, the former number corresponding to the red, and the latter to the violet, wave.

4. Rays of light falling upon the surfaces of ponderable bodies, are reflected and refracted. The law which rays follow in reflection is, that 'the angle of reflection is equal to the angle of incidence.' The law of refraction is, that 'for each substance the sine of the angle of refraction bears a constant ratio to that of the angle of incidence.'

5. If a ray of light proceeding from any illuminated object be forced to pass through a crystal of Iceland spar, it will be separated into two rays, each of which possesses certain properties not enjoyed by the original ray. This decomposition of the ray is termed *double refraction*, and the refracted rays are said to be *polarized*. Polarization may be effected also by reflection.

6. When a beam of light is allowed to fall upon a glass prism, it is found that the portion which passes through the prism, and is refracted, has undergone a most astonishing change in its character. It is no longer a single beam, but presents the appearance of an elongated spectrum, which exhibits in regular order all the colors of the rainbow, the *red* occupying that end which is least refracted, and the violet being at the other end of the scale.

This experiment of the decomposition of a beam of white light, was first performed by Sir Isaac Newton, and the spectrum resulting therefrom has been called the Newtonian spectrum. Until within comparatively recent times, it was believed that this prismatic analysis of a solar beam completely exhausted its contents; but the profound researches which have been made within the present century, have disclosed new wonders more astonishing, probably, than any others within the whole range of physical science.

The essential identity of *light* and *heat* is one of the wonderful truths unfolded by researches upon the spectrum. It is well known, that heat obeys precisely the same laws as light, in its reflection and refraction; that it can be polarized equally with light, and that, in fact, the parallelism between the two classes of phenomena is absolute and perfect. Moreover, most of our sources of light are also sources of heat; and the truth is, that the great source from which we derive all our light, is also the source of all the heat which is developed on the earth. Now, how are we to account for the communication of heat from the sun to the earth, separated as they are from each other by an interval of 92,000,000 miles? The facts that heat can be produced by mechanical means, such as friction, and the falling of bodies; that the expenditure of a given quantity of motion causes the development of a definite quantity of heat, and that the expenditure of a given amount of heat is attended with a definite quantity of motion, all forbid the idea that heat is in itself a material substance. The only other hypothesis we can adopt to account for the transmission of heat from the sun to the other bodies of the system is, to suppose that, as there is a luminiferous ether pervading space, so there is a *calorific* ether, through whose undulations heat is transferred from one body to another not in contact with it, or with any intervening ponderable matter. It will at once be suggested, that the two ethers are perhaps not distinct in their natures, but that they constitute one and the same substance; and the fact is, that all the investigations point to the correctness of this surmise. It is found that, when a solar beam is decomposed into the seven component rays, which give us the sensations of red, orange, &c., these are not, by any means, all the elements into which the original beam is resolved. If the prism be so arranged as to produce a vertical spectrum, with the red at the bottom, and the violet at the top, and the face of a thermopile be introduced into the violet end, the needle attached to the instrument will be deflected from its normal position, indicating thereby the presence of heat in the spectrum. If the thermopile be gradually moved down the spectrum, the deflection of the needle will continue to increase, and by the time the red ray has been

reached, the needle will be in a state of violent agitation. This indicates that, along with the luminous rays, there are also rays of heat, in the spectrum, and that if they are not of the same nature, they are certainly united by some invisible chain, which the prism is not competent to break. Moving our indicator down below the red, the temperature continues to rise, and it does not begin to decrease until we have passed down through a distance fully equal to the length of the luminous spectrum. Here is a wonderful fact to be accounted for, and we can explain it only on the supposition that the solar beam is made up of heat waves, as well as waves of light. Now, by a very ingenious method, which it is not necessary to describe, the wave-lengths of the calorific rays have been measured, and it is found that if the wave-lengths of the two kinds of rays be arranged in a row, they form a regular series of numbers increasing gradually from the violet, through the indigo, and others, down to the red, and still down through the waves which are only calorific. There being no break in the series, we are forced to conclude that radiant heat and light are produced by undulations of the same, universal ether. This will become still more evident by conducting the experiment in a different manner. Let us, instead of analyzing a solar beam, produce a beam by the application of heat to a ball of iron. Immediately the iron begins to give off rays of heat, which can be reflected, refracted, and polarized, and their wave-lengths can be measured. As the iron grows hotter, the wave-lengths are found to diminish, and their number to increase. After a while, the iron reaches the stage of incandescence, and emits a dull red light, which becomes brighter and brighter, until at length the state which we call 'white hot,' is attained, and the wave-length corresponding to this degree of heat and light, is the shortest in the series. This experiment clearly indicates that the light and the heat are but different manifestations of the same cause. A long, slow undulation of the ether produces in us the sensation of heat, or when not powerful enough to affect us, still indicates itself as heat by the deflection of the needle of the thermopile; let the rate of vibration be increased, and the heat becomes more intense; continue

to increase the velocity with which the particles of the ether swing from side to side of their mean position, and soon the nerves of the eye become excited, and the sensation of light is produced. It is reasonable to infer, that if the iron could be rendered sufficiently hot, the rates of vibration of the particles of the ether would go on increasing, and thus the whole range of spectrum colors be produced, and that, at last, by the commingling of all the rays, there would result a pure beam of white light equal to that of the sun itself.

We have seen that slow undulations produce in us the sensation of heat, and that, by more rapid vibrations, the optic nerve is excited. Recent experiments show that the slow waves which produce *invisible heat*, as we may call it, do not at all affect the sensibility of the eye. May there not likewise be waves too rapid in their movement to produce the sensation of light? Experiment demonstrates that this is so. Turning to the other end of the spectrum, we find that beyond the violet and where there is neither light nor heat, there exist rays which manifest themselves by their power of influencing *chemical combinations*. It is to these rays, that the art of photography owes its existence, and by means of them photographs have actually been taken in the dark.

The solar spectrum is then by no means so simple a thing as was originally imagined. Instead of being merely an elongated beam, tinted with the seven colors of the rainbow, it is an assemblage of a vast multitude of ethereal undulations of every conceivable rate of vibration within certain limits, those of long lengths and slow periods manifesting themselves as rays of heat, those which are shorter and more rapid producing in us the sensation of light, and those which are the shortest and fastest (and which are the result of the most powerful impulses of force) producing chemical action, tearing asunder compounds into their constituent elements, and forcing elements of unlike character into the closest combination.

But what causes these undulations in the ether? A wave can be originated only by an impulse given from without to the particles of the body in which the wave exists. If, therefore, light and heat be constantly passing as ethereal undulations

from body to body, and from atom to atom, throughout the universe, the impulses which excite these waves, must come from the bodies which are the sources of the light and heat; and as motion can only be caused by motion, it follows that if any body is a source of light or of heat, that body itself, or its particles, must be in a state of motion which is communicated to the particles of the ether. There are many reasons for holding this view of the origin of light and heat, among which we shall notice only the following: If a body weighing one pound be allowed to fall from a height of 772 feet, and its motion be suddenly arrested, a quantity of heat will thereby be developed sufficient to raise the temperature of a pound of water one degree, and, conversely, if the temperature of a pound of water be reduced one degree, the work accomplished is sufficient to raise a body weighing a pound through 772 feet. Now, it is an accepted principle of mechanics, that motion cannot be destroyed, but simply transferred from one body to another; and, in accordance with this principle, we can account for the apparent annihilation of the motion of the falling body only by supposing that the motion of the body in space has been taken up by its own particles, and that the resulting molecular motion is manifested as heat. Again, if the pound of water has its temperature lowered one degree, a certain portion of the motion of its particles is transferred from them and taken up by the first body, which, if free to move upward, will thereby rise through 772 feet. The heat of a body, then, according to this hypothesis, is but a mode of motion of the atoms or molecules which compose it. So long as this molecular motion is so slight as to excite but a slow rate of vibration in the particles of ether, the resulting undulations will manifest themselves to our senses only as heat, but if the motion is sufficiently powerful to cause rapid vibrations in the ether, the undulations of the latter will affect our optic nerves, and produce the sensation of light. Now, since heat and light are constantly passing backward and forward in all directions throughout the universe, it follows that all the particles of matter of which all the bodies in the universe are built up, are in a state of constant vibration; and since there is no known secondary cause

which could originate this vibration, it is manifest that motion must have been the original category in which matter sprang from the hand of its Maker; a deduction in perfect harmony with the Mosaic account of Creation, in which 'Let *Light* be' is stated as the very first fiat of God. What a contrast between this view and that ordinarily held in regard to the fixity of matter! If we have any idea of absolute rest, it is that we derive from the contemplation of a solid body whose position is seemingly fixed, and yet, if our hypothesis be true, each particle of that body is describing a little orbit millions of times in every second.

Twelve years ago, the man who would have dared to assert that the star Sirius was surrounded by an atmosphere of hydrogen, and that he could prove it, would have been looked upon as a fool, and laughed at or pitied, not only by the ignorant multitude, but by the most enlightened men of science. To day, startling as it may seem, we are able to determine some of the chemical constituents of any star, however remote from us, even though it should require millions of years for its light to reach us, and even though it may have been blotted out of existence hundreds of thousands of years ago. This wonderful result is accomplished by the examination of the dark lines of the spectrum, mentioned in the article on light to which we have already alluded. Various attempts have been made to discover the origin of these Frauenhofer's lines, as they are called, but until within the past ten years no satisfactory solution of the problem has been offered. In the year 1860, Messrs. Kirchhof and Bunsen published an account of their researches upon the subject, and to these gentlemen is due the complete explanation of the origin of the dark lines. They found that when a homogeneous body is brought to a state of incandescence, it emits a light whose color is peculiar to itself, and that when a beam of light proceeding from such a body is refracted, it does not form a spectrum consisting of the seven primary colors, but if the body be a solid or liquid, the spectrum presents a continuous band of a single color, while if it is a gas, or vapor, the spectrum is not continuous, but consists of one or more *bright lines* which occupy definite

positions corresponding to definite degrees of refrangibility, and to definite wave-lengths in the luminiferous ether. They found, moreover, that if the light emitted by the body were *pure white*, the colors of its spectrum corresponded in all respects, *save the dark lines*, with those of the solar spectrum, but that when the light emitted had any positive color, the bright lines of its spectrum corresponded in position and in breadth with certain of the dark lines of the solar spectrum; and, what is particularly to be noticed, that each substance with which they experimented, gave bright lines which were peculiar to itself.

These are the facts, some of which may have been known before they were collated by the gentlemen above mentioned. Now for the explanation. It is known that when two waves of light interfere with each other, there will be produced a resultant wave compounded of the other two. This resultant may be *zero*, or it may be equivalent to the sum of the components. Suppose now that A is a body so highly heated as to emit *white light*. Its vibrations will excite in the ether which surrounds it, waves of all conceivable rates of vibration, and a beam of these rays, falling upon a prism placed in its way, will be decomposed into a long spectrum, the luminous portion of which will exhibit the seven primary colors. If now, a highly heated homogeneous vapor be placed between A and the prism, the particles of this vapor will be necessarily vibrating at a rate identical with that of certain rays proceeding from A, and the two systems of rays interfering with each other will, some of them at least, mutually destroy each other and produce darkness. The effect, then, of the interposition of the vapor is to sift out of the beam proceeding from A, the very rays which the vaporous particles emit, and the consequence is, that when the spectrum is formed, those rays which would produce the bright lines corresponding to the rates of vibration of the particles of vapor are absent, and, instead of bright lines crossing the spectrum, we have dark ones.

A comparison of the spectrum formed by the solar rays with those from various other substances, discloses the fact that the bright lines produced by the vapors of all the chemical ele-

ments with which we are acquainted, have their exact counterparts in the dark lines of the solar spectrum; and this leads to the following theory of the physical constitution of the sun. The body of the sun is not an opaque dark body, as is usually stated in text books on astronomy, but it is an incandescent globe, composed of the same substances which constitute the earth, and so highly heated as to emit the purest white light. Surrounding this globe is an atmosphere, holding in suspension the vapors of the very bodies of which the globe is composed. These vapors, by the oscillations due to their intensely heated condition, excite waves in the ether which interfere with, and to a greater or less extent extinguish, the waves of corresponding rates proceeding from the body of the sun, and by the absence of their bright lines in the spectrum, is indicated the presence of the vapors themselves in the solar atmosphere. This is one of the most advanced positions which science has yet reached, and it may seem to be so far advanced as to be still within the regions of sublime speculation. But the basis of the theory is too well established, and it is too consistent with the entire body of undulatory physics to admit of any doubt as to its correctness, or of any hesitancy in accepting the conclusions at which it arrives. We are just as certain, for instance, of the presence of the vapor of sodium in the solar atmosphere, as we are that soda exists in a flame which emits the peculiar yellow light, which we know to be due to its presence in that flame.

Besides the solar spectrum, the spectra of most of the planets and of many of the stars, have been studied with many important results in regard to the physical constitution of those bodies: perhaps the most important to us being that in all of them are to be found elements identical in chemical constitution with those which are so familiar to us on our globe. How strong an argument does this great fact afford of the habitability of those distant orbs, and, not only of their habitability, but even of their being actually inhabited.

Wonderful as the results which we have been describing must seem, there is yet another which, if possible, is more astonishing still. It is the evidence which spectrum analysis

affords of the motions of these bodies which we designate as fixed stars. This result has been reached within the last year, and we are indebted to Professor Stokes, of Cambridge, for the clearest exposition of its principle which we have seen. We cannot do better than to present a brief abstract of his remarks upon the subject, delivered at the recent meeting of the British Association for the Advancement of Science.

We know that the pitch of a musical sound depends upon the number of atmospheric undulations which reach the ear in a given time, say a second. If the body from which the sounds proceed be at rest, the number of pulsations will be constant, and the pitch will remain the same; but if the body be in motion, the number of vibrations which reach the ear will be changing every second, and the pitch of the sound will be continually varying. If the body be moving toward the ear, the waves of air will be crowded together in that direction, more waves will fall upon the ear in a given time, than if the body were at rest, and the pitch of the sound will consequently be elevated. But if the body be moving in the opposite direction, the waves will be separated from each other by longer intervals than if they proceeded from a stationary body, and the pitch will consequently be lowered. Now, the practical effect of crowding the waves together, is the same as if their lengths were shortened and their refrangibility increased, while the effect of opening out the waves is to increase their lengths, and to diminish their degree of refrangibility. Precisely the same reasoning will apply to the ethereal undulations which are manifested to us through the eye. If we know that a certain star contains any given element, as hydrogen, and we find, by analyzing its spectrum, that the hydrogen lines are *changing their position*, we can only infer that it is because the waves proceeding from the hydrogen are undergoing a change in their degree of refrangibility; and this can be due to no other cause than the motions of the star which contains the hydrogen. If the refrangibility be increasing, the star must be moving toward us; if it is decreasing, the star must be receding from us. Now, this very test has been applied to the star Sirius, by the distinguished physicist, Mr. Huggins, of England,

who finds conclusive evidence of the presence of hydrogen in the atmosphere of Sirius. But, in comparing the position of the hydrogen lines in the spectrum of that body, with their position in the *normal* hydrogen spectrum, he finds that they are a little *less* refrangible in the former than in the latter; and he announces, as the result of his calculations, that Sirius is actually receding from us at the rate of nearly thirty miles per second; a velocity considerably greater than that of the earth in its orbit around the sun. Yet we are accustomed to call Sirius a *fixed* star!

The contemplation of the grand discoveries which we have been attempting to describe, offers great inducements to the wildest speculation, but we do not propose to carry our readers beyond the domain of facts and of legitimate inferences from them. Astronomy has long since taught us that all the suns, and planets, and sidereal systems, of which the visible universe is composed, are in a state of rapid motion, and that the motions of all the bodies of our system, at least, are periodic. The science of undulatory physics teaches us, if not by actual observation, at least by direct inference, that all the molecules and atoms of which all material substances are composed, are likewise in a state of rapid motion, and that this motion, too, is periodic. Mechanics teaches us, that when a body in motion excites or induces motion in another, it does so only at the expense of its own motion, which it may finally lose entirely. When we see an incandescent mass of metal losing its light, and finally its heat, until its temperature is reduced to that of the air and other surrounding bodies, is because the motion of the atoms of metal, which at first is competent to excite luminous waves in the surrounding ether, is transferred step by step, from these atoms to the ether, until at length their oscillations become so slow as to excite only the sensation of heat, and finally give rise to no special sensation whatever. We have seen that spectral analysis leads to the belief, that the sun is a vast globe of incandescent matter, whose molecules are in the most rapid undulation; that those molecular undulations are communicated to the particles of the ether, and through them transmitted to the planets and other

bodies which compose the solar system. Now, whatever amount of molecular motion may be excited in the particles of those bodies, by just so much must the motion of the particles of the sun be diminished, and of just so much heat and light must he be deprived. This process has been going on in all past ages, and is still going on at the present time. Every year the sun loses a portion of his light and heat, which has been calculated to be sufficient to melt 22,776,000,000,000,000,000,000,000 tons of ice placed at a distance of 95,000,000 of miles from his centre. Taking for granted that his annual loss of heat has been pretty nearly constant, it would not be difficult to compute how many ages must have elapsed since the sun was a mass of highly attenuated vapor, and taking into consideration the expansibility of solid and fluid bodies in passing to the gaseous state, we might, in a rough way, estimate the volume occupied by the sun when in that condition. This calculation has been made, but the numbers resulting therefrom would be of no service to us in forming an idea of the size of the sun at that early period of his history. Suffice it to say, that he must have occupied a space millions of times greater than at present, many times greater even than would be filled by a globe with a diameter equal to that of Neptune's orbit, and that the length of time which has elapsed since the existence of such a state of things is so great that, in comparison with it, the historical period dwindles down into a mere ripple on the great ocean of duration. At that time, the earth with its moon and all the planets with their satellites, must have been embodied in the great mass of the sun himself,—the primal mass out of which all the members of our system have been evolved.

We have thus reached through the light furnished us by spectral analysis, the nebular hypotheses respecting the original condition of matter; an hypothesis promulgated years ago from purely astronomical considerations. But the hypothesis has now a much more extensive reach than when it was first conceived. It now enables us, not only to comprehend the original condition of our system, but also to raise the veil from its future. For, admitting that the sun has, through all past ages, been losing, by radiation, a certain portion of his light

and heat, and that the laws of nature are unchanged, it follows that, year after year, in the long future, the cooling and the darkening process will go on, till the heat and the light of the sun shall die away and be no more, and one eternal, frozen night, shall embrace them all—sun, moon, earth, the stars, and all the satellites. That is to say, if God, the centre of all life, and light, and joy, were not present, to uphold, preserve, and replenish the magnificence and beauty of his universe with the omnipotent beams of his infinite wisdom, power, and beneficence.

ART. IX.—*La Science en Ballon.* Par W. de Tonvielle. Paris. 1869.

It was a marvellously strange scene which met the visitor two years ago, as he entered the large halls rented by the Aerostatic Society of England, and great was his surprise as he beheld the result of all that the practical good sense of the English, their mechanical ingenuity, and their scientific experience had been able to produce. He may have recalled what Franklin said a few days after he had witnessed, in the château de la Muette, the first famous balloon ascension made by Montgolfier before Louis XVI. A great lord, who had also been present, asked him what he thought of the wonderful invention; and the great American replied: 'It is a new-born child!' showing that, with all his enthusiasm and warm interest in such matters, he did not share the exaggerated hopes of the French people. What would the sage have thought of the strange, motley assemblage of contrivances, which the great English society exhibited nearly a hundred years later? That the child had nearly died of starvation, in spite of its magnificent godfather and godmother; that it had been sent out to

join jugglers and acrobats in village fairs and town exhibitions; in fine, that it was a child yet in size and in spirit.

There was strange but undeniable evidence here, that some arts can, under certain circumstances, decline and be forgotten, even in our state of high culture. Balloons might readily disappear from among men, if it depended on science alone; they might have to be invented once more in our age, as has been the case with painting on glass. The exhibitors seemed to have forgotten the very first principles of aerial dynamics; their efforts were almost altogether limited to an imitation of the flight of birds, quite unmindful of the fact, that even the first and most important balloon already surpassed the bird, as much as reality surpasses dreams. There were all kinds of possible and impossible contrivances to be seen, from the mannikin furnished with real swan's wings, fastened to immense frames, to the vessels shaped after the model of ships, which were to be filled with hydrogen, and to be steered through the air by the aid of a huge rudder! There was but a single balloon there that could be tested practically; a so-called Montgolfière, which was to ascend, held by stout ropes to the ground, after the manner of the captive balloons exhibited repeatedly in Paris. It was to be filled on the first day of the exhibition; but a gentle breeze, which would not have affected in the slightest degree a well-built balloon, caused it in an instant to sway so violently to and fro, that the silk folds fell upon the furnace, over which it was held; and the visitors of the Crystal Palace were not even aware of what was going on, when a slight blaze flashed up, and the Montgolfière had ceased to exist.

Was it not surprising that the year 1867 should not even have been able to accomplish what, in the year 1784, was successfully done by a Frenchman? At that time, the first aeronaut, Pilâtre, rose in a captive balloon, taking up with him an officer of the army, and two ladies, and thus proving to an astonished world that the air was navigable. Before him, no one had ever dared to entrust himself to a few hoops covered with thin silk; learned societies had laughed at him; the civil authorities had prohibited the efforts, even when the only pas-

sengers of the tiny wicker-basket were an ass, a lamb, and a chicken; and Pilâtre had to petition the governess of the royal children to procure for him, from the king himself, leave to expose his life.

And where was England, where was the world, now, at the expiration of eighty-six years, if we may judge by this pompously announced Universal Exhibition? Men of science looked with a sense of amazement, mingled with shame, at the extraordinary contrivances. There was the cigar-ship, a tunnel-shaped balloon, within which a few hundred captive passengers were to turn a gigantic wheel, after the fashion of a squirrel's cage, to propel the monster through the air. Near by was a famous machine, covered with goldbeater's skin, and working admirably as long as it was suspended by two good sized ropes from the walls of the building. A curious noise was heard, and a flying-car started in the air, by the aid of a tiny steam engine heated with petroleum, and moving two screws at the rate of six hundred turns in the minute; but here also the admiration of wondering spectators was seriously impaired by a long iron rope, on which alone the machine could move forward and backward, as upon an aerial rail. Then there was a superb collection of wings, some as small as a pigeon's, and others as large as a windmill's sails; with a tail and without one; moved by the muscles of the human body, or by powerful steam engines; only no wings among them all could raise the owner a foot from the ground without the aid of a rope, on which he was suspended. They were generally nothing more than copies of former experiments; of the noble 'Butterfly,' who, after the French Revolution, threw himself boldly from a window of his house on the river, and astonished the washerwomen below by falling into their soapsuds; or of a poor musician, who, a hundred years before, attempted to fly down from one of the high terraces at St. Germain, and escaped with a broken leg. Finally, there were machines without end, that were to move in the air by their lightness! Here a round copper kettle, weighing only a few pounds, and made to be sent flying by continuous explosions of gun-cotton; there a huge air-tight basket, with a petroleum lamp, which

was to be kept burning inside, but was happily never lighted; on one side an aluminum motor by a Frenchman, in real motion, though cautiously remaining on the same spot; and on the other an apparatus (built, under instructions from the Duke of Argyle, for the study of the flight of birds) which hopped ungracefully from place to place. Nor were, on the other hand, and as if to contrast agreeably with these strictly scientific and very complicated contrivances, the simplest methods left unrepresented; kites were exhibited of all sizes and colors, from the triangular toy of the street boy, to the gigantic monster of the Japanese amateur. The simple truth, that the resistance of the wind brought to bear upon a plain surface, and acting against the force exercised by a rope held on the ground, will make the body, to which the surface belongs, first rise and then move forward in the air, was acknowledged, but no addition had been made to the first efforts attempted by Benjamin Franklin, Rommas, or Berthollet. Self-registering thermometers, it is true, were found attached to some of these kites, to ascertain at least the state of the temperature at a given height; but this suggestion seemed to have exhausted the ingenuity of exhibitors. No one had been bold enough to offer to rise himself by the aid of one of these colossal kites, that would have easily lifted a man up to the clouds; perhaps the Society had forgotten to insert in the list of premiums a reward for such an act of courage; or can it be that science considers kites as undeserving of examination and improvement, merely because they are also toys? And yet Franklin would, without his kite, never have rediscovered the lightning rod!

By the side of kites stood—rockets. The power of this weapon (for only as such, unfortunately, does it appear as yet) to lift up a considerable weight, is perfectly well known, and easily ascertained by simple calculations. As long ago as 1830, an Italian savant fastened a sheep to the stick of a rocket, raised it to a great height, and saw it return, uninjured, to the ground. In times of war, it is also well known, lights are thrown up by the same means, which burn steadily for several minutes in the air, sustained by miniature parachutes, and thus enable one party to watch and examine the works of the other.

A French author offered, in 1866, in the *Scientific Review*, to submit to the experiment of being fired off by means of a gigantic rocket, relying upon the well-established fact, that the movements of this projectile are much gentler, and less dangerous, than those of a balloon suddenly rising to a great height. The offer seems, however, to have been utterly disregarded; or perhaps it was looked upon as an attempt to ridicule the unsuccessful efforts of aeronauts generally. The neglect of this mode of transportation in the air is to be regretted, as there is evidently a wide field open yet for the inventor; gunpowder, generally looked upon merely in appreciation of its destructive power, has already been eminently useful in saving life; for the guns placed near dangerous rocks and sand bars along the coast have rescued many a human life, by means of the ropes which they have thrown on board ships in the act of being wrecked. Gunboats have even gone out in a storm, and, bravely anchoring within reach of a perishing vessel, have fired their life-saving guns, and rendered essential service to mankind.

No improvement, however, was exhibited at the Crystal Palace, and no success seems to have been achieved in any direction. In vain had the company offered a handsome premium for the machine which should accomplish even the modest triumph of remaining but five minutes at a height of ten feet in the air. In vain had the Duke of Sutherland offered another premium for the apparatus—not a balloon—that should lift a man a hundred feet high. In vain had the Aeronautic Society even promised a considerable sum to the inventor of the lightest machine relatively to its power. All this liberality, all this zeal, had called forth no genius; and not a single premium, we believe, was awarded.

Is the navigation of the air then impossible? Far from it. We have two facts, which prove what can be done. A captive balloon was exhibited in Paris for more than two years, making regular ascensions, carrying numerous passengers, defying wind and weather, enabling scientific men to make most important observations, and yet no accident ever occurred. In England, Mr. Glaisher, the director of the Meteorological Observatory at

Greenwich, had, in 1869, successfully made twenty-nine ascensions, rising, at times, to a height of 30,000 feet, and without any inconvenience to his health, or danger to his life. And even if such ascensions were too dangerous to become general, balloons held by a rope, are capable of rendering great service; we may cite, as an example, the silk-balloon of an amateur in Mulhouse, which was exclusively used for the purpose of rising every hour, during three months, to a certain height, in order to allow two self-registering thermometers to bring down the exact state of the temperature in various strata of the atmosphere.

But the dangers of ballooning are very much exaggerated. The number of accidents occurring in aerial ascensions, may strike the imagination, because such ascensions are rare, excite great interest, and are reported all over the world; but, compared in statistic tables with others, they fall far below the average, for instance, of those occurring on our own railways and steamboats. The main difficulty in England, has been the vicinity of the ocean, which surrounds the island on all sides; France would offer a larger field, and an aeronaut, rising, for instance, at Bourges, might travel a considerable distance in all directions, without incurring any danger of being drowned; and if a still larger field is desired, our own continent would surely leave abundant elbow room to the most adventurous traveller. Accidents, it is true, have happened, and aeronauts have been drowned, like poor Arban, whose balloon was the first successfully to cross the Alps, but who disappeared after an ascension he made on the shores of the Mediterranean, and is therefore presumed to have found a watery grave. But he was ill prepared for any voyage at all, and had made no provision whatever for a wind that might carry him out to sea. Nowadays, aeronauts generally provide themselves with life-preservers, and might even do well to follow the example of certain French engineers, who used to put on an India rubber jacket of such ingenious construction, that they could go out into the open roadstead of Havre, pushing a barrel of provisions before them, and there, in the presence of a great crowd of spectators in boats and steamers, enjoy a comfort-

able lunch, while floating on the water. How much, however, can be done merely by a judicious management of the balloon itself, and of its ballast, will be seen from a recent adventure. Ambitious of imitating the example of Mr. Sadler, who was the first to cross the Irish Channel and to land safely at Holyhead, after a voyage of some forty miles in the air, a Mr. Hodsman ventured, in 1867, to change a mere show-ascension, from the Dublin Crystal Palace, into a regular voyage to England. At a certain height, it seems, his balloon was suddenly seized by a violent east wind blowing in those regions; and although it had become dark night, the bold aeronaut determined to drift along on the wings of the tempest. It was a terrible position, however, for all around him was the blackness of night; above, a heavy rain beating furiously upon his inflated balloon, and below, the roaring of the storm-tossed waves. He was afraid to rise too high, lest he should be driven he knew not whither, and therefore he kept close to the surface of the sea, only using the precaution of letting down his grappling irons. Seated in his tiny boat—a mere wicker-basket—he held with one hand a bag of ballast, and with the other the end of the rope, which, at a depth of over a hundred feet, skimmed the waters. Each time the iron touched the crest of a wave, he felt the pulsation by a slight shock, and each time he dropped a handful of sand to rise a few feet above the furious sea. Then again the rain came in a torrent, beating upon the balloon, and forcing it, in a corresponding loss of gas, to drop down lower; but the intrepid traveller threw another handful of sand into dark space, and he rose once more. For two hours he sailed thus along, skimming the waves, and threatened every moment to be swallowed up by their fury; but so instantaneous was the effect of the ballast thrown out, and so admirable his management in timing the relief correctly, and in wasting not a grain, that he did not throw out over two hundred pounds during the whole time.

At last, however, he seemed to be conquered. Wet to the skin, exhausted by fatigue and intense excitement, and deafened by the roaring of the storm above and the sea beneath him, he lost his consciousness. It was ten o'clock at night;

the balloon, deprived of the hand that had so long guided it intelligently, was rapidly sinking; a few minutes more, and it would have touched the waters; the little boat would have filled, and the brave traveller would have been drowned. Fortunately, at the very last moment Mr. Hodsman awakes, seizes his ballast-bag, which still held about thirty pounds of sand, and almost instinctively throws it out. Instantly the balloon bounds up with a truly terrific energy, and rises in a few seconds to a height of several thousand feet. When Mr. Hodsman recovered his consciousness entirely, and looked around him, he was high above the clouds, and there all was calm and serene. The moon, then at its full, was shining brightly, and its soft, cold light fell upon the black sky and the edge of a few fleecy clouds; while on their upper side there floated a second balloon, the image of the original.

As the traveller was too high to distinguish whether he was sailing over sea or over land, he determined to descend. He opens the valves, the gas rushes out merrily, and in a few minutes he discerns below him little dark squares surrounded by still darker lines. They are cultivated fields and their hedges. Not far from there, a cluster of lights shines through the darkness; it is a town, and Mr. Hodsman feels that he is safe. Soon he is seen by late travellers; they help him to secure his balloon, and he is received in triumph by thousands who have been attracted to the place of his descent.

Unfortunately, these voyages across the Irish Channel seem generally to have had sad results for the travellers. Mr. Sadler was, soon after his famous sail across, thrown from a balloon in which he had ascended from Bolton, and dashed to pieces against a tall chimney. Mr. Hodsman, having risen at Cork, and being driven towards the Atlantic, lost his grappling iron, and had to hang by a single rope, while he was driven, like a second Mazeppa, before a violent tempest across fields, and roads, and rivers. At last he could throw himself down; he escaped with a few contusions, but the balloon, relieved of his weight, immediately rose to a great height, and drifted towards the ocean. What became of it, no one knows, or ever will know; but the loss was a serious one to the owner.

Nevertheless, the danger is but small; too small to weigh anything in comparison with the great results which aeronauts may hope to obtain for science; especially if we bear in mind the imperfect state of their own science, and the large number of ill-prepared and ill-taught adventurers, who boldly attempt voyages into an unknown realm. The paternal government of many a European kingdom jealously watches over the outgoings and incomings of its subjects, and prohibits their using gunpowder, selling kerosene, or transporting gun-cotton; but anybody is at liberty to risk his life by going into the air in a crazy balloon. The Papal government, we believe, is the only one which limits the freedom of its subjects in this respect: it sternly forbids any aeronaut to ascend in company of a woman!

Nor ought it to be forgotten that the traveller in the air has the immense advantage of being able to remain where he is, just as long as he chooses and his provisions are sufficient. How many points favorable for landing must he not see from his vantage ground, while sailing along in peaceful regions for hours, or even days! If he is over the sea, a hundred vessels notice him from afar, and would be ready to succor him, should he fall; if he has a continent beneath him, he is the cynosure of a multitude; he can be seen by the inhabitants of a whole province at once, and help is near at hand, wherever he may choose to let himself down. In the meantime, if he be at all prepared for his enterprise, he is literally master of space; when, below, all is calm, he can fly before the wind with a rapidity unknown even to the powers of steam on earth; when his breeze subsides, he opens a valve and rises till he meets another favorable current; or he throws out some ballast and sinks till he finds a wind blowing in the desired direction. There is but one drawback upon his freedom: he must remain in motion. If he land once, his balloon must be emptied; and to fill it again, and let it rise once more, is a task that can, as yet, be accomplished only where a gas company lends kindly assistance, or where abundant pecuniary means admit of a heavy outlay. Mr. Ansell, it is true, exhibited, in 1867, a most ingenious contrivance, which, if it prove successful, will make the aeronaut almost entirely independent; it consists of an air

pump placed in the car, by means of which, gas can be drawn from the balloon and condensed; this would make the car heavier and the balloon sink; by returning the gas to the balloon, the latter would become lighter and again rise, while no gas at all is lost.

Such an exchange would be all the easier, as the great Euler already has accurately determined the height to which a balloon will ascend, when it possesses a given power at starting and then is left to itself. The work, a kind of swan's song, was the last which the great mathematician completed before his death; his son found the calculations on the slate, freshly written, where the illustrious blind savant had just jotted them down hastily under the first enthusiastic impression produced by the recent news of Montgolfier's success in navigating the air. But the difficulty in all such contrivances consists not in their inefficiency so much as in the weight which they add to the balloon; till now, the most expert and most scientific aeronauts, like the writer of the work mentioned at the head of this article, are disposed to think that the best balloon is one of the very simplest kind, carefully ballasted, covered with an impermeable and light material and filled with pure hydrogen. The only necessary addition, for ascensions like those of Mr. Glaisher, who reached an altitude of 30,000 feet, is an apparatus for heating, as the cold becomes intolerable in those regions so near the sun, and a supply of well prepared oxygen to compensate for the loss in the highly rarified air. Both these points have, however, recently become extremely uncertain in the opinion of the best authorities on such subjects. The theory that the temperature of the atmosphere sinks lower and lower as we rise in the air, is no longer a fundamental law. Mr. Glaisher first discovered, on his aerial voyages, that there were regular currents of warm air passing through the upper strata of the atmosphere, and describes his feelings of comfort and his grateful sensations as he entered into these milder regions, with great energy and naiveté. Before him, no one had suspected that the aeronaut, after passing this region of arctic coldness, could suddenly find himself in the midst of an aerial

Gulf Stream. Nearly at the same time, observations made on the summit of the great St. Bernard, proved that on Alpine heights, also, the temperature does not decrease regularly, but varies according to the season of the year and the hour of the day, but especially in consequence of currents of warm air which strike the mountain sides. A naturalist stationed at St. Théodule in the winter of 1866 recorded a temperature there of eight different years, which was higher than that of Geneva, although the point of observation was at a height of over 6,000 feet above the surface of the lake. The latest ascension of Mont Blanc by the renowned English philosopher has led to the publication of similar observations there: when the wind lulled or was cut off by projecting rocky walls, the heat of the sun became intolerable, the snow melted and the thermometer rose, as if in utter disregard of an elevation of more than 12,000 feet. The same learned observer states distinctly, that on the highest summit of Mont Blanc he found no difficulty whatever in breathing or in making his voice audible without the slightest effort; thus disproving at least the general application of the law of the air becoming intensely rarified at a great elevation, as has been supposed heretofore. Whence, however, these currents of warm air come, whether from the surface of the earth, and in consequence of casual occurrences or of permanent influences, or from the regions of the so-called planetary atmosphere, these are questions yet undecided, and which none but aeronauts will in all probability ever be able to answer satisfactorily.

A similar problem, to be solved by means of balloons only, is that of the true character of the air in those regions. Is it exactly the same as that which we breathe, or does the oxygen increase as we rise? It is not impossible even that hydrogen which with us is scarcely perceptible, may become more and more prevalent in the higher regions and appear there in considerable quantity. This supposition, improbable though it appear at first sight, is strongly supported by the fact that Mr. Robertson has actually found hydrogen in air brought down from an altitude of 20,000 feet. The discovery was at first much doubted, even by men like Gay-Lussac, and the presence

of hydrogen was ascribed to gas which had escaped from the balloon; but it has on the other hand been greatly strengthened by the analysis of a number of ferruginous meteors, which have also showed a considerable quantity of condensed oxygen in their pores, as if they had been subjected to an immense pressure while they were passing through an atmosphere of that gas. These facts are still too new and have been as yet too little examined to overthrow existing convictions, but they are problems of great importance and of the very highest interest, which will enable the well prepared aeronauts of future days to make valuable additions to science.

Another remarkable phenomenon which seems to contradict established principles of Physics, concerns the laws of spectral analysis. It is not only that the quantity which appears in naval observations under the name of depression of the horizon, becomes perfectly enormous at a great elevation above the earth, and that hence, for instance, the sun and the moon at the moment of their appearance above the horizon, become gigantic beyond anything ever seen on earth, while the latter itself, after having at first appeared as a plain, gradually assumes to the eye of the aeronaut, the shape of a deep dish, raised all around,—but the solar spectrum does not lose its so-called atmospheric rays! Heretofore it was thought, that only the lower strata of the atmosphere were charged with that moisture which produces the remarkable refraction of the sun's rays, and that higher up, the air became drier and purer, and hence was unable to show those rays. It is a matter of peculiar interest that at the very time when the French savant Janssens, sent by the Imperial government to Masulipatam to observe the eclipse of the sun there, reported the results of his observations by spectral analysis to the Academy. Mr. Glaisher sent entirely different results of his aerial observations, establishing the presence of very fine and close rays, which are invisible on the surface of the earth. There is evidently all the difference in the world between the blue of the sky as seen on the side of the Alps, in the disturbing vicinity of vast glaciers, and that color which the balloonist sees as he soars free in the ether, untrammelled and unaffected by any object within many miles

in any direction, and this problem also is yet to be solved.

The aeronaut has, however, of late been so signally successful in making important additions to our knowledge of the heavens, that our author may be pardoned in hoping to see the earth return to the firmament the favor which it received when Prometheus stole fire from the dwelling of the gods and became the benefactor of mankind. The balloon has, moreover, the advantage of sailing in utterly unknown regions and if it is true that the unforseen has the lion's share in ordinary circumstances, 'how much more must this' be true in a position where everything tends to excite the mind, to sharpen the senses, and to stimulate the imagination of the explorer! We remember with pleasure the discovery thus accidentally made by one of the earliest aeronauts, Garnerin, who rose in 1808, during a dark November night, and all of a sudden found himself in a perfect rain of fire; the balloon had drifted into a shower of meteors. He returned to Paris, reported the fact to the Academy, had it inserted in the *Moniteur*, and—was forgotten. But when the doctrine of the periodical return of these meteor showers was first discussed, his report was fortunately remembered, and the new theory received a strong confirmation from his early discovery.

Here lies the great charm of the navigation of the air for the man of science. A whole, vast department of nature, still undiscovered and unknown lies before the aeronaut, and offers him rewards richer than any of the trodden fields on earth. It is true, this very ignorance of the territory he goes to explore is a source of a thousand errors; but he will remember also that the study of Nature, in its most exalted form, and looked upon as a war to the knife against ignorance and superstition, imposes duties and requires a courage like those of the soldier. We are apt to speak of the perils of the air, but they are in no ways greater than those the chemist encounters among his phials of poison and his explosive substances, or those of the physician who boldly faces the plague and deadly diseases. Surely the man of science ought to have at least as much courage in his profession as the warrior, who goes out to win glory or death amid balls and bullets on the field of battle.

But it is true that courage is not all that is needed. To study the atmosphere, to make experiments, to test the elements, the man of science must be his own aeronaut, and learn to manage his balloon, as his colleague on earth handles his telescope or works in his laboratory. Mr. Glaisher, who has made twenty-eight ascensions with the aid of an experienced balloonist, Mr. Coxwell, to whom fell the whole duty of directing the voyage as far as the balloon was concerned, now prefers making his ascensions accompanied only by a few amateurs who are sufficiently at home in matters of science to aid him in making his observations. The aeronaut must profit by every oscillation, by every pulsation, of the balloon itself; for there is no movement made by the delicate machine which does not indicate some change in the realm of the air that is worth knowing. And how can the explorer maintain himself in a horizontal position without watching the barometer while he is throwing out ballast? How can he measure the rapidity with which the balloon rises at one moment and rides on the wings of the storm in the next moment unless he be perfectly at home in all the formulas of Euler and other great mathematicians? He must be able accurately to weigh the pressure, which a certain degree of moisture in the air will exercise on the immense surface of his balloon, and be prepared for the sudden and enormous relief, which the latter will experience, when a dry hot air comes to evaporate that moisture in an instant; he must ever be ready fairly to estimate the effect which the rays of the sun will have on his ship as he suddenly leaves the cool shelter of a bank of clouds. Nor can he for a moment forget that he is insulated in the air and therefore cannot well make experiments on the electricity of the air without exposing himself to imminent danger. Gay-Lussac, to avoid this, dropped from his balloon an immense iron wire, which was to be put in temporary contact with the earth on the surface of a lake: it acted as a huge lightning rod, while he was endeavoring to ascertain the amount of electricity in the air and the manner in which it was diffused over the vast silken surface of his balloon. What a weird feeling of marvellous security it must give to the aeronaut who sails serenely through

the midst of storm clouds, as Crosby did, when he was perfectly enveloped by dark, dense clouds and yet felt no unpleasant sensation! How unspeakably grand the sight must be as the aerial traveller, from his cosy car hovering in a perfectly calm and peaceful region, looks down upon a terrible hurricane that sweeps with irresistible fury through forests and towns, or watches a terrific cyclone, lashing the ocean into foam and engulphing magnificent vessels with hundreds of immortal souls! The thunder may roll through the welkin and the lightnings may flash up and down, but the aeronaut either sails tranquilly through the dark masses of gigantic clouds or with a slight effort gives a new impetus to his balloon and finds himself in a few seconds in calmer regions, where the air is still and the sun shines brightly. It is this very impunity amid violent thunder storms which has led men of science to raise the new and most interesting question, whether these lightnings are real discharges or perhaps merely the reflection of distant flashes, after the manner of the harmless discharges from Geisler's tubes? The aeronaut alone can solve these mysteries; but he can, and we do not doubt he will be able to tell us how storms originate, by searching out their beginning in the regions that give them birth and by watching the formation of the clouds from which the lightning is about to flash forth. He will tell us whether Volta was right when he taught us that hailstones dance merrily up and down between two grim cloud banks, as corkballs dance between electrified plates; for he will go and watch their dance and see how they are first formed, how they cover themselves, layer after layer, with hoarfrost and half melted snow, and finally drop down upon the earth, always unexpected below and yet always proving most dangerous missiles and doing terrible damage. He will solve the mystery by which electricity holds these back in suspense and then suddenly sends them down in vast showers.

In like manner he may ascertain at last the true nature of the Northern Lights. The Aurora Borealis breaks forth suddenly, it is true, and allows no time for preparation; but then it almost always announces its coming some time beforehand by violent electric disturbances, giving thus as it were notice

to the aeronaut to make his balloon ready for those regions, where he may see the glorious spectacle long before it becomes visible on earth. And what a world of discoveries there may be before the bold adventurer who shall first go bravely to meet the mysterious display! What a marvellous sight to behold the nadir in a blaze of brilliant light, to sail perhaps in a sea of flames! The first aeronaut who shall witness the beginning of an aurora, watch and observe it scientifically, and follow it, in his fleet vessel, as it moves above him in a gigantic arch, will make himself a name to live forever. It was in an attempt to ascertain the true nature of some of these phenomena that Mr. Glaisher came so near losing his life. He had left the neighborhood of Wolverhampton in the afternoon of the fifth of September, and had tried to obtain photographic views of the enchanting landscape below and the marvellous scenery around him, but failed on account of the constant oscillations of his balloon. He had then risen rapidly and reached a height of five miles, when the thermometer had fallen below zero and no dew showed any more on one of Regnault's hygrometers. His friend, Mr. Coxwell, very busy with the management of the balloon, was out of breath from over-exertion; hence, when Mr. Glaisher found suddenly much difficulty in seeing the column of mercury in the thermometer and the hands of his watch and called upon his companion to help him in reading the instruments, the latter was unable to render him any assistance. He had, just at that moment, to leave the car and to mount on the great hoop to put it in order. Mr. Glaisher glanced at the barometer, which was rapidly falling and indicated an altitude of 29,000 feet! Soon after, he put his arm on the table, and felt his ordinary strength in so doing. But when he wanted to use it, he found it unable to render any service. It must have lost its strength in an instant. He tried to use his other arm and found it likewise paralysed. Then he tried to move his whole body and succeeded after a fashion, but he felt as if he had no limbs. While looking once more at the barometer, his head sank on his left shoulder. He tried again to move his body, but this time in vain; he tried to raise his head, but he succeeded only for an instant and then it fell back again. His

back was leaning against the planking of the car and his head on one of the corners; in this position he looked up at Mr. Coxwell, who was still busy above him. He saw him, however, only vaguely, and when he tried to speak to him, he could not utter a sound. The next moment he had passed into utter darkness: the optic nerve had been paralysed; still, he had his full consciousness, and his mind was as active as ever. He thought he was asphyxied and would die quickly, if the balloon did not descend very soon; a moment later he lost his consciousness entirely, as if suddenly fallen asleep; all the senses were closed to outward impressions, except hearing, of which he could, of course, not judge, as at the height at which he was—six or seven miles—no sound ever falls upon the ear of man. Just before losing all consciousness in this manner, he had heard Mr. Coxwell trying to speak to him of temperature and observations; apparently the next instant he felt that somebody spoke to him and tried to wake him up: hearing and consciousness had, therefore, returned. He heard him then say: Try, now try! but he could not yet see, speak, or move. At last he saw vaguely the instruments near him, then Mr. Coxwell, and finally the surrounding objects. He rose and looked around like a person just awaking from profound sleep, and said, 'I have fainted.' 'Yes,' replied Mr. Coxwell, 'and I was very near fainting, too.' The latter then showed him his hands, which were frost-bitten and black, and told him how on descending from the hoop he had been compelled to hold on with his arms; how he had seen his companion lying motionless and without breathing in the car, and trying to open the valve in order to let the gas escape and to lower the balloon, had found himself unable to move. Fortunately, he had bethought himself of pulling the string with his teeth; the gas had rushed out, the balloon had come down to warmer regions and both aeronauts had escaped from a terrible death at the greatest height which man has ever yet reached in a balloon. They both calculated that they had been at a distance of 36 to 37,000 feet from the earth, and congratulated themselves that there were no pillars of Hercules in the air.

During another excursion, the intrepid traveller found him-

self exactly above Titbury Fort, and so near that he could count all the guns and might easily have made a plan of the works. It is well known that this was one of the uses to which balloons were put during the late war; the Federal troops employed them frequently, but only after the manner of field telegraphs, by means of variously colored lights. A fixed light served as a permanent point, and another moveable light gave, by the direction in which it appeared, different alphabetical signs. Mr. Godard, a French aeronaut, has invented a complete system of telegraphic signals for day and night service alike, which has been approved by the Emperor and is regularly practised in the camp at Chalons. This application of the new art is naturally still in its infancy, but promises for the future very great results, and may in the end produce an entire change in modern warfare.

Among the minor incidents of navigation in the air it must not be forgotten that the beauty of the view from such a marvellous vantage ground is an almost irresistible charm for all those who have enjoyed it once. The prospect downward is sublime, whether the aeronaut look upon fields and forests, towns and hamlets, and long lines of railways and canals, or glance at the masses of clouds below and above him, now clad in sombre black, now lighted up with a wondrous silvery sheen, and then again resplendent in the gorgeous reflexion of the rising or the setting sun, repeating on a magnificent scale the small effects seen on earth, where windows seem to be blazing up in red flames under the rays of the sun. Or he amuses himself with watching the effect which the appearance of a balloon has on domestic animals: they seem, with a few exceptions, to be seized with intense terror. The birds in the forests utter a loud cry when they see the monster appear above the tops of the trees; the sheep in the fields run frightened to the shepherd, or gather in a densely packed mass, trembling in all their limbs. Dogs alone are bold enough to bark at the unusual sight and sometimes become so enraged by the sublime indifference of the huge machine, as it slowly escapes them, that they follow it for miles with all the signs of perfect fury. At a height of some 800 feet, the landscape looks most beautiful,

as there the eye takes in an immense expanse and still is able to distinguish all details; the aeronauts appear to themselves to stand still, while the earth is swiftly passing beneath their feet and presenting at every moment a new scene of beauty and grandeur to their astonished eye.

When they decide at last to land, there comes a short period of intense excitement and considerable danger. Formerly, balloons were allowed to fall wherever they happened to be; they knocked against chimneys and trees, or they dragged along the ground and were torn to pieces, or ruthless boors made them captives to extort from their owners large sums on the plea of compensation for the damage they had done to their fields and their crops. Now they are almost uniformly provided with a long rope, to the end of which a small anchor or a set of grappling irons is fastened. These hold to the ground, where it is soft, or to trees, and thus enable the aeronauts to descend in safety and protect their balloons against destruction. Mr. Yon, the manager of the London balloons, conceived the happy idea of changing this rope into a broad ribbon, which trails flat on the ground, and as the huge hemp ribbon is moreover set with stiff, prickly thorns on one side, it is no longer a cable, but an immense brush, of over 1,200 feet in length, which by its friction is able to check the motions of the largest balloon in existence. Its power is strikingly illustrated by the fact that while it weighs only about two pounds a yard, several men cannot make it move a foot on a grass-plot; the resistance offered by wet ground or by rocks would of course be very much greater. This effective contrivance will, moreover, enable the aeronaut to dispense with his anchor and thus to gain room for many desirable instruments now excluded by the weight of the heavy iron. It will also enable him by the greater certainty of a safe descent at any given point, to effect a landing wherever he chooses, and to escape places where he is threatened by dangers from nature or men. For it must be confessed, to the disgrace of our age, that the aeronaut is no safer now than he was a century ago, when ignorance and superstition, those inseparable twin sisters, combined to plunder him and threaten his life in many a French

or German province. In the year 1864, in Leicestershire, England, the country people captured a balloon, in which a party of eight men of science had made an ascension from the Crystal Palace in London, and tore it to pieces, before the eyes of the rightful owners, in order to get possession of the silk, of which it consisted! By the aid of the new landing apparatus, these dangers will be avoided and misfortunes like those which befell the daring aeronauts, who first attempted to cross the Channel, will become impossible. It is well known that after Blanchard and Dr. Jeffries had in 1785 safely crossed from Dover to the forest of Gûines, where a column still marks the spot of their landing, Pilâtre and young Romain perished miserably in the same neighborhood, because of their ignorance of the various currents of air in the higher regions, and poor Deschamps, who had risen at Calais, fell a victim to his temerity, unwilling as he was to entrust himself to a different wind and falling miserably from a great height upon the shore, where his lifeless, shattered body was found soon after. Nowadays the descent is made in the most methodical manner. As soon as the aeronaut decides to alight, all the objects on board the balloon are arranged according to their value; those which are to be sacrificed first in case of an accident are close at hand; others, of more importance, are safely stowed away. Even if the ballast does not suffice, the former have to go overboard at once: provisions, clothing and the cheaper instruments. Thermometers and telescopes are encased in thick, stout covers, so as to resist a considerable shock in falling, and still costlier instruments are placed upon the persons of the travellers. Our author describes his descent on such an occasion in the following words: 'It was time to lower our balloon, for we had not more than a quarter of an hour's daylight left, and yet we knew that all is not done when the aeronaut leaves his car; he must empty his balloon, fold it up carefully, draw it from its frame, wrap it up in its covering and carry it to the nearest village. At this moment we had above us a vast dome of black clouds, cleft here and there so as to allow the eye to catch a glimpse of the blue sky through the narrow opening. The wind, which drove us onward so gently that we were unconscious of

the motion, brought us echoes from the north; we heard the barking of dogs, the firing of guns and even the cackling of hens; the air was so still and sonorous. We were not more than three hundred feet above the surface of the earth, our guide rope being in the vapors which made everything beneath us invisible as in an immense sea of alabaster. The upper surface of the mist being perfectly level, reflected the sound of our voices very promptly and distinctly; the echo, which seemed to mock us from a place just below our car, repeated every word we uttered, with the utmost accuracy. After a while one of our ropes touched; then the other: we were sailing over meadows covered with thin, poor grass. I told one of my companions to keep the valve open with all his strength, and advised the other two to hold on to the ropes till the last moment, and then to jump carefully.

The anchor held fast. We felt only a very slight shock, thanks to a stout ring of caoutchouc, which Mr. Giffard has invented, and which connects the guide rope that holds the anchor, with the lower hoop of the balloon. It acts like an admirable spring. Unfortunately, the soil is too dry, and too sterile, to give the anchor a good hold; the latter slips, and the field shows a huge furrow, as if a monster plough had passed over it at the rate of five or six miles an hour. The clods of earth fly to the right and the left, and the long rope trembles like a chain stretched to its utmost. In the meantime, the gas has escaped; the balloon begins to collapse; the air enters, and the light silk flaps furiously against the skeleton.

All of a sudden, a loud, startling noise is heard; I bend down to pick up some bottles that may hurt us, and to throw them overboard. Some one cries, The balloon has burst! and the earth rises up to us at a furious rate. I throw myself out of the car to seize the hoop; something falls on my head; my feet go up in the air; a rain of things which we had kept in the car falls on my head, and then all is utter darkness. Have my eyes been put out? No! I see a light. Are we still dragged along? Another moment convinces me that all is quiet, and we are at rest. Then a voice is heard, and my companion cries, 'Why don't you come out from under there?' I obey

the order, creep out, and find that I have been lying snugly under the car, which has been turned upside down, so as to cover me completely and safely. The balloon is as flat as a cake; not a drop of gas is left inside. Our first impulse is to laugh heartily at our situation. At that moment a crowd of country people come rushing up with open mouths and staring eyes; they have seen us tear along carrying away large branches from the trees, bound over low cottages, threaten frightened animals, and at last disappear in a huge, incomprehensible mass. They run up to pick up the bodies of the unfortunate travellers, and they find us laughing heartily. 'Come, children,' I say, 'pick up those bottles; there is wine in there, returning, not from a voyage round the world, but from the clouds; pick up those chickens, too, lest the dogs be too quick for you; help the man there that is lying on the grass as if he were going to snore furiously, and assist him to fold up the balloon! You shall all be well paid; we'll shake hands with each other, and smoke a pipe together, and all of us will have something to tell to-morrow morning!'

DAPHLES.

Once on the throne of Argos sat a maid—
Daphles the Fair; serene and unafraid,
She ruled her realm, for the rough folk were brought
To worship one they deemed divinely wrought
In beauty, and mild graciousness of heart:
Nobles and Courtiers, too, espoused her part,
So that the sweet young face all thronged to see,
Glanced from her throne-room's silken canopy,
Broidered with leaves, and many a snow-white dove—
Rosily conscious of her People's love.
Only the Chief of a far frontier clan,
A haughty, bold, ambitious nobleman,
By law her vassal, but self-sworn to be
From subject, tithe, and tribute boldly free,
And scorning most this weak girl-sovereign's reign,
Now from the mountain fastness to the plain
Summoned his savage legions to the fight—
Wherein he hoped to wrench the imperial might
From Daphles, and confirm his claim thereto:

But Doracles, the insurgent Chief, could know
Nought of the secret charm, the subtle stress
Of beauty wed to warm unselfishness—
Which in her hour of trial wrapped the Queen
Safely apart, in golden air serene
Of deep devotion, and fond faith of those
The steadfast hearts betwixt her and her foes!
The oldest Courtier schooled in statecraft guile,
Some loyal fire at her entrancing smile
Felt strangely kindled in his outworn soul;
Far more the warrior youths her soft control
Moulded to noble deeds, till all the land,
Aroused at love's and honŏr's joint command,
Bristled with steel, and rang with sounds of war!

Still rashly trusting in his fortunate star,
This arrogant Thrall who fain would grasp a crown,
Backed by half-barbarous hordes marched swiftly down
'Twixt the hill-ramparts, and the Western Sea:

First, blazing homesteads greet him, whence did flee
The frightened hinds thro' fires themselves had lit
'Mid the ripe grain, lest foes should reap of it—
Or, here and there, some groups of aged folk,
Women and men, bent down beneath the yoke
Of cruel years, and babbling idiot-speech:
'Methinks,' cried Doracles, 'our arms will reach
The Realm's unshielded heart, for lo! the breath,
The mere hot fume of rapine and of death
Which flames before our legions, like a blight,
Withers the people's valor, and their might.'

The fifes played shriller! the wild trumpet's blast
Smote the great host, and thrilled them as it passed,
While clashing shields, and spears which caught the morn,
And splendid banners in strong hands upborne,
And plumed helms, and steeds of matchless race,
And in the van that clear, keen, eagle face
Of Doracles, firm-set on shoulders tall,
Squared like a rock, and towering o'er them all,
With all the pomp and swell of martial strife,
Woke the burnt plains, and bleak defiles to life;
So phalanx after phalanx glittering filed
Firm to the front; their haughty leader smiled
To see with what a bold and buoyant air
The lowliest footman marched before him there,
Till his proud head he lifted to the sun,
And his heart leaped as at a victory won
That self-same hour, o'er which bright-hovering shone
The steadfast image of an ivory throne.

But the Queen's host, by skilful champions led,
Its powers meanwhile concentred to a head,
Lay, an embattled force, with wary eye,
Ready to ward or strike whene'er the cry
Of coming foemen on their ears should fall
Nigh the huge towers which guard the Capital.

Not long their watch; one bluff October day,
There rose a blare of trumpets, far away,
And sound of thronging hoofs which muffled came,
Borne on the wind like the dull noise of flame
Half stifled in dense woodlands; then the wings
Of the Queen's host, as each swift section flings
The Imperial Banner proudly fluttering out,
Spread from the royal centre. Hark! a shout,
As from those thousand hearts in one great soul
Sublimely fused, rose, thunder-deep, to roll

In wild acclaim far down the quivering van;
And wilder still the heroic tumult ran
From front to rear, when, thro' her palace gate,
Daphles, in unaccustomed martial state,
A keen spear shimmering in its silver hold,
And on her brow the Argive crown of gold,
Flashed like a sunbeam on her warriors' sight.
Girt by her Generals, on a neighboring height
She reined her Lybian courser, while the air
Played with the bright waves of her meteor-hair,
And on her lovely April face the tide
Of varied feeling—now a jubilant pride
In those strong arms and stronger hearts below,
And now a prescient fear—did ebb and flow,
Its sensitive heaven transforming momently.
But soon the foeman's cohorts, like a sea,
With waves of steel, and foam of snow-white plumes,
Slowly emerged from out the forest glooms,
In splendid pomp and antique pageantry.
An ominous pause! And then the trumpets high
Sounded the terrible onset, and the field
Rocked as with earthquake, and the thick air reeled
With clangors fierce from echoing hill to hill.

Bloody but brief the contest! All the skill
Of Doracles against the steadfast will
Planted by love in faithful hearts that day
Frothed like an idle tide that slips away
From granite walls! His knights their furious blows
Discharged on what seemed statues whose repose
Was iron, or their fated coursers hurled
On spears unbent as bases of a World!
Meanwhile the whole dread scene did Daphles view
With anguished, tearless eyes. But when she knew
The victory her's, down the hill-slopes she urged
Her restless steed, where still but faintly surged
The last worn waves of tumult; there her bands
Of conquering Captains she with fervent hands
And o'erfraught swelling breast did proudly greet.
Yet her pale face was touched with pity sweet,
While the chained rebels passed her, worn and sore
With ghastly wounds, and shivering in their gore.
But when, untamed, uncowed, in 'midst of these,
The grand defiant form of Doracles,
Rose like a God discrowned, her wan cheeks flushed,
And thro' her heart a quick hot torrent rushed
Of undefined, mysterious sympathy.
Viewing that haughty brow, that unbent knee,
'O kingly head!' she thought, 'too well I know

How bitter-keen to him the signal blow
This day hath dealt! O kingly resolute eyes,
Shrining the sovran soul! 'Twere surely wise
To change their glance of cold vindictive gloom
To grateful light, and make what seemed a doom
Heavy as death, the clouded path to fame,
Lordship, and honor!' Ah, but pity came
To crown admiring kindness with a flame
Of subtler life; for he, the vanquished one,
On whom that day his fate's malignant sun
Had set in storms, that night would slumber, kissed
By a fair phantom girt with golden mist,
A new-born delicate love, but dimly guessed
Even in the pure depths of the maiden breast,
Whence the sweet sylph had 'scaped her unaware.
But when the evening silence drew anear,
And round about the borders of the world,
The second night since that great contest furled
Its brooding shades, the young Queen all alone,
Paused by the dungeon floor whereon were thrown,
At listless length, the limbs of Doracles.
'How, how,' she murmured, 'may I best appease
His stricken pride, or touch to tender calm
His fevered honor? with what healing balm
Allay the smart wherewith his spirit groans?'
Perplexed, and yearning, on the dismal stones
Without the prison door she walked apart.
Love, doubt, and shame all struggling in her heart,
Till the large flood of mingled love and woe
Rose to her snowy eyelids, and did flow
In soft refreshing tears, like spring-tide showers:
Then, bright and blushing as the moss-rose bowers
Of dewy May, she pushed the huge grate back,
And thro' the dusky glooms, the shadows black
Dawned glowingly! Next for a moment, she
Stood in a timid, strange uncertainty,
Changing from rosy red to deathly white;
When, as a Queen sustained by true love's right,
She spake in mild, pure, steadfastness of soul:
'I come, O Doracles, with no mean dole
Of transient pity, but to show thee how
Thy mistress would exalt the abased brow
Of one who knows her not!' Therewith she freed
His fettered limbs, or yet his brain could heed,
Or comprehend her mercy's cordial scope;
His soul had shrunk too low for dreams of hope,
Such swift misfortunes smote him; still, when all
The Queen's fair meaning on his mind did fall,
The locked and frozen sternness of his look

Broke up, as breaks the death-cold wintry brook
Its ice-cold spell at noonday; yet his face
Was lighted not by thankful, reverent grace,
But flashed an evil triumph where he stood,
Spurning his unloosed chains. In such base mood,
One eager foot pressed on the dungeon stair,
'What terms,' he asked, 'O Queen! Demand'st thou here
I pledge thee faith?' Silent were Daphles' lips,
And all her gentle hopes by swift eclipse
Were darkened! With a deathly smile she signed
The Chief farewell, as one who scorned to bind
Her mercy with set terms! He turned to go,
Self-centred, callous, dreaming not how low
Her heart had sunk at each cold, shallow word
With which his barren nature, faintly stirred
By ruth, or love, or pardon, dared repay
Her matchless mercy! On his unchecked way
He turned to go, when with one shuddering sob,
And deep-drawn, plaintive breath which seemed to rob
Life of its last dear hope, the Queen sank down
Wrapped in a death-like trance. With sullen frown,
And many a muttered oath, he raised her form,
Frail now as some pale lily by the storm
Wind-blown, and beaten; for at woman's love
He could but vaguely guess, and no poor dove,
Pierced by the woodman's shaft, was less to him
Than this fair spirit struggling in the dim
And tortured twilight of unshared desire:
Nor could he part the pure romantic fire
Of such high passion from the lukewarm flame
That feebly burns in sordid hearts and tame,
Not of love's heat, but vacant flattery's born,
To feed his pride, yet stir the latent scorn
Of that rough manhood such hard natures know.
Waked from her trance, with wandering eyes and slow,
The Queen looked round, but dimly conscious yet,
Until at last her faltering glance was set
On Doracles, to whom that he might see
How a soft ruth to love's intensity
Had strangely grown, she laid her deep heart bare;
Then, with a sweet, but nobly queen-like air,
She said, 'O Doracles! in just return
For all this love and pity, which did yearn
To lift thee fallen, and to find thee lost,
And slowly sickening underneath the frost
Of bleak despair, I well might ask of thee
Thy heart with all its rarest freight in fee,
Save that I feel my virgin fame and life
Must count as pure when thou hast made me wife,

Tho' but a wife in state and name alone.
Behold, O Chief! I proffer, too, my throne,
Not as thy freedom's sole condition given,
But that men's eyes, and scornful thoughts be driven
Away from what in me may seem as ill,
If—if—perchance thou should'st reject me still.'
At which hard word she droops her head, and sighs,
While patient tears bedew her downcast eyes.

Now, with sly semblance of a soul at ease,
Her liberal proffer crafty Doracles
Freely embraced! They passed the prison-bound,
And that same day with silver-ringing sound
Of trump and cymbal, the state heralds cried
Abroad thro' all the city, far and wide,
The Queen's vast pardon; whereupon her Court—
Nobles and dames—each quaintly gorgeous sport,
Known in the old time, bold or debonair,
With feasts, and mimic strifes, and pageants rare,
Did hold in honor of their Sovereign's choice;
A choice none there would question! Not a voice,
Gentle or simple, but was raised to bless,
And pray the kindly Gods for happiness
And peace on both! Meanwhile the Thrall made King,
Albeit a secret anger still would wring
His thankless soul, in princely fashion took
The general homage, nor by word or look
Betrayed the festering consciousness within:
So gracious seemed he, Daphles' hopes begin
To wake, and whisper fond, sweet, foolish words
Close to her heart, that flutters like a bird's,
Wooed in the spring-dawn: yet, alas! alas
For joy that dies, and dreamy hopes that pass
To nothingness! In 'midst of this, her trust,
Came a swift blow which smote her to the dust;
News that her ingrate love had basely fled,
Whither none knew. Scarce had this shaft been sped
From Fate's unerring bow, than swift again
Hurtled a second steeped in poisoned pain;
For now the whole dark truth came sternly out:
Leagued with her bitterest foes, a savage rout
Of mountain robbers o'er the frontier-land,
He unto whom she proffered heart and hand,
Kingdom and Crown, had bared his treacherous blade,
And of the great and just Gods unafraid,
Upreared his standard 'neath the blood-red star,
And raised once more the incarnate Curse of war!

So from that day all gladness left the heart

Of broken Daphles; she would muse apart
From Court and friends, her once blithe footsteps slow,
Her once proud head bow'd down, and such wild woe
Couched in the clouded depths of mournful eyes
That few could mark her misery but with sighs
Deep almost as her own. At last, she wrote
(For still her soul hailed, watery and remote,
One beam of hope) a missive tender, sweet,
Charmed with such pathos, to her delicate feet
It might have lured a spirit, nigh to death,
And straight imbued with warm compassionate breath
A heart as cold as spires of Arctic ice!

Ah futile hope! Ah fond and vain device!
Not all the pleading eloquence of wrong,
Veiling its wounds, and golden-soft as song
Trilled by the brown Sicilian nightingales,
In dusky nooks of melancholy vales,
Could melt the granite will of Doracles.
Each tender line she sent him did but teaze
And sting his obdurate temper into hate,
As if the deep harmonious terms that wait
On truest love, were wasp-like, poisoned things:
Her timorous hints, her sweet imaginings,
Far thoughts, and dreams evanishing, but high,
Filled with the maiden dews of sanctity,
He crushed, as one might crush in maddened hours
The fairest of the sisterhood of flowers;
His answer nought of tenderness avouched,
In briefest terms of contumely couched;
Holding *all* love—the noblest love on earth—
Of lesser moment than an insect's birth,
Buzzing its life out 'twixt the dawn and dark.
That letter stifled the last healthful spark
Of the Queen's flickering reason, turned her wit
To wild and errant courses, sadly lit
By wandering stars, and orbs of fantasy.
Deeming that she full soon must sink and die,
Daphles, still true to that one dominant thought
And firm affection which such ill had brought,
Summoned her learned scribes and bade them draw
After strict form, and precedents of law,
Her solemn testament; whereby she gave
Her throne to Doracles, whene'er the grave
Closed o'er her broken heart and humbled head.
But now, her chiefs and nobles, hard bestead
By Circumstance, and dreading much lest he,
The renegade, and rebel, who did flee
From love to league with license, yet should sway

The honored Argive sceptre, on a day
Called forth to solemn council and debate
Lords, liegemen, ministers, to save the State
From threatened tyranny, and upstart rule;
Thereto the wan Queen, powerless now to school
Features or mind to subjugation meet,
Came weakly tottering; in her lofty seat
She sank bewildered, listless; all could mark
Beneath her languid eyes the hollows dark,
And—save that sometimes as she slowly turned
Her wasted form, the fires of fever burned,
Death's prescient blazon, on each sunken cheek—
Her face was pallid as a cold-white streak
Of wintry moonlight on Siberian snows;
Her quivering mouth, and chill contracted brows,
Bespoke an inward torture, while from all
The shrewd debate within that Council Hall,
Her dim thoughts wandered vaguely, lost and dumb.
But when her pitying maidens round her come,
And gently strive on her drooped head to place
The self-same laurel garland which did grace
Her warm, white temples on that morn of strife,
And woeful victory, her sick brain seemed rife
Once more with memories; in her hand she pressed
The half-dead wreath, and o'er her flowing vest
Strewed the plucked leaves those aimless fingers tore
Unwittingly; which on the marble floor,
Down fluttering, one by one, lay blurred and dead,
Like the sere hopes her withered heart had shed,
Smitten of love; for now she touched the close
Of the soul's dreary Autumn, and the snows
Of winter soon would clasp her eyelids cold!
Yea! soon, too soon; for while her fingers fold
The garland loosely, and in fitful grief,
She still would strip the circlet leaf by leaf,
Till now one-half the wreath is plucked and bare,
She lifts her dim eyes, hearkening, as though 'ware
Of mystic voices calling on her name;
Therewith her cheek, whence the quick fevered flame
Had quite pulsed out, with one last quiver, she
Drops on the cushioned dais passively;
For Death, more kind than love, hath brought her peace!

Long was it ere her stricken Realm could cease
To mourn for Daphles; yet her burial rites,
With all their mournful pomps, their sombre sights
Funereal, scarce were passed, when her last Will,
Despite its humbling terms which rankled still
In all men's minds, her faithful courtiers sent

With news of that most sudden, sad event
Which made him King, to restless Doracles.
What recked he then that to its bitterest lees
A pure young soul had quaffed of Misery's cup,
And after, Death's? 'My star,' he thought, 'flames up,
Fronting the heights of empire! All is well!'
Thereon, impelled by keen desire to dwell
In his new realm, with reckless haste he rode
From town to town, till now the grand abode,
The Palace of the royal Argive race,
Did rise before him in its lofty place,
O'erlooking leagues of golden fields and streams,
Fair hills and shadowy vineyards, by great teams
Of laboring oxen rifled morn by morn,
Till the bared tremulous branches swung forlorn,
'Gainst the red flush of Autumn's sunset sky.
Housed with rich state therein, full regally
The King his sovereign life and course began,
Striving at one swift bound to reach the van
Of princely fame; his rare magnificence
Of feasts, shows, pageants, and high splendors, whence
The wondering guests all dazzled went their way,
Grew to a world-wide proverb for display
And costly lavishness! Yet *one* there was
O'er whose gray head these days of pomp did pass
Like purpling shadows o'er the faded grass.
Wit touched him not to smiles, gay music's flow
Fell powerless on his closed heart's secret woe,
While at their feasts silent he sat and grim.
Ofttimes the king a cold glance cast on him,
As one who marred their mirthful revelry,
And in the boisterous spring-tide of their glee,
Rose like a boding phantom! More and more,
He felt a vague, dim trouble at the core
Of his rude nature stirred, whene'er he saw
Phorbas draw near; something akin to awe,
If not to dread; for this old man did stand
Chiefest of Daphles' mourners in her land;
As chief of her life's friends, ere that black doom
Stole from her heart its joy, her cheek its bloom.

Just where the mellowed rays of noonday light
Streamed through the curtained gloom obscurely bright
Which wrapped the great Art-Galleries richly round,
There hung, 'mid many a stately portrait bound
In frames of costly ivory carved and wrought,
A picture which the king's eyes oft had sought
With anxious wonder; for, day following day,
Would Phorbas, mutely sorrowing, make delay,

Going, or coming from the Council-Hall,
To view that muffled mystery on the wall.
Over it flowed a veil of silvery hue
With here and there fine threads of gold shot through
The delicate woof; and whoso' chanced to turn
A glance thereon, would feel his spirit burn,
To pierce the jealous veil whose folds might hide
Some priceless marvel. Now, at high noontide
Of one calm Autumn day, the king again
Met Phorbas—his worn features drawn with pain,
And in his eyes the sharp salt rheum of age—
Still poring on the picture! '*Thou* a Sage!'
Sneered Doracles, 'yet idly bent forsooth,
On vaporing fancies?' Then, more harsh, 'The truth!
The *truth*, old man! What strong spell drags thee here?
(Some charm, methinks, 'twixt passion and despair:)
Morn after morn, forcing thine eyes to stray
O'er yon blank mystery? Prythee, Phorbas, say
What image lurks beneath that glimmering shroud?
Perchance the last King's. Well! am I less proud,
And princely-wise than he? Or art thou bold
To deem *me* all unworthy to behold
My brave forerunner?' Thereupon he knit
His rugged brows, the while his soul was lit
To keen, impatient wrath. With trembling hands,
But not for fear, Phorbas unloosed the bands,
Studded with diamond points which clasped the veil
Close to its place. The startled Prince grew pale,
As there, in all her fresh young grace, did shine
The face of Daphles, with a smile divine
Into arch dimples rippling joyfully!
Some faintly-pensive memory seemed to vie
With deeper feelings, in the low, quick tone
Wherewith the King spake, whispering to his own
Half-wakened heart—'Certes, it could not be,
That she, who owned the glorious face I see,
Bright with all brightness of a young delight,
Yet pined and withered 'neath the fatal night
Of starless grief!' To which, 'Thy pardon, Sire,'
The old man said, 'but ere my life's low fire
Hath quite gone out, I fain would free my soul
Of that which long hath borne me care and dole;
So, sovereign Lord! list to the tale I tell!'
And therewithal, did Phorbas deem it well
To show how Daphles' darkened life did wane:
How love, first touched by doubt, soon changed to pain,
And, last, blank desolation, whose wild stress
Wrecked and made bare her perfect loveliness,
O'erwhelming wit with beauty: 'still,' said he,

'O! Sire! to her last hour most tenderly
She spake of thee, her twilight reason set
On the sole thought, "*My love may love me yet;*
For man's love comes with knowledge, so I deem,
Slow-hearted man's!" Ah, heaven! she could not dream,
But *thy* name filled her dreams. When madness stole
Like a dread mist about her, and her soul,
Wound in its viewless cerement-folds accurst——'
'Madness!' the King cried in a sharp outburst
Of wild amazement; 'Madness! *I* have known
The mad impatience of a will o'ergrown,
When sternly thwarted in its fiery zeal,
But dreamed not how these fairy creatures feel,
These soft, frail-natured women, if perchance
Love turn on them a cold or lukewarm glance
Of brief denial!' Then, the impatient red,
In a swift flood, but not of anger, spread
O'er the King's face; convulsed, it seemed, and stern.
But when from garrulous Phorbas he did learn
How the Queen's laurel wreath half bare became,
The hot blood ebbed, and o'er its waning flame
Coursed the first tear his warrior-soul had shed.
Nor could he rouse again the lustihead
Of ruder-thoughts, but, thickly muttering, laid
On the fair portrait of the sovereign maid
A reverent hand; from 'midst the painted dome
Of the great gallery forth he bore it home,
Unto the secret chamber of his rest;
There next his couch he placed the beauteous guest;
There feasted on its sweetness; and since nought
Of public import now did claim his thought,
No fierce war threatened, no shrewd treaties pressed,
Strangely the picture mastered him; it grew,
As days, then weeks, and seasons, o'er him flew,
A part, an inmost essence of all life,
Which touched to joy or thrilled to shuddering strife
The soul's deep-seated issues: yet, at last,
Stronger the fierce strife waxed; the bliss was passed;
And, wheresoe'er the King went, night or day,
One haunting phantom barred his doomed way!

But, 'ere he reached the worst wild stage of woe,
Thro' many a change of passion, swift or slow,
The King passed downward, nearing treacherous death;
And thus it happed, our old-world legend saith:

The more he gazed on Daphles' blooming face,
All flushed with happy youth, and Hebe grace,
The more her marvellous image seemed alive;

He saw—or dreamed he saw—the warm blood strive,
In ruddier tide, with conscious hues to dye
Her lovely brow, and swan-like neck, or vie
With Syrian roses on her cheeks of flame;
The more he gazed, the more her lips became
Instinct with timorous motion, till a sigh,
New-born of hcnied love unwittingly,
Seemed hovering like a murmurous fairy bee,
About their rich, half-parted comeliness:—
What slight breath softly stirs the truant tress,
Which like a waif of sunset light did rest
In wandering golden lustre on her breast?
And what dear thought her bosom graciously
Heaves into gentle billows, like a sea
Moon-kissed, and whispering? Thus the King would task
Long hours with doting questions, when the mask
Of dull State forms, and ceremonial play,
With wearied brain and hand was cast away,
And he a dead maid's crafty image turned
To breathing life, and blissful love that burned
From her wild pulses and fond heart to his,
And on her mouth he pressed a bridegroom kiss!

Then, the sweet spell was broken; Conscience spoke,
And in her burning depths pale Memory woke:

Even in that gentle shape his cold self-will
Had strangly turned, and wrought him direful ill;
Distempered, moody, sometimes nigh distraught
With ceaseless pressure of one harrowing thought,
He grew, and hapless thrills of lonely pain;
Her picture, imaged on his heart and brain,
Ruled all his tides of being, as the moon
Draws changeful seas; now in a clear high noon
Of memories bitter-sweet his soul would swim,
Anon to sink in turbulent gulfs and dim
Of wild regret, or as the dead to lie,
Locked in a mute, life-withering lethargy:
Creator sweet of all his fortunes high,
O! that in Hades she could hear his cry
Remorseful, and come back in pitying guise,
To ease his grief, and calm his tortured sighs!
A thousand, thousand times this wild desire
Would wake, and surge thro' all his veins like fire;
Followed, alas! too soon, by such deep sense
Of powerless will, and mortal impotence,
As in red hurry up from soul to cheeks
Runs rioting, and ever harshly seeks

To drag them into gaunt, grey lines of care.
Months sped eventless, with his dark despair
Grown darker; 'till, one sad November morn,
Set to the rhythmic wail of winds forlorn,
They found, just where the morning's shadowy gloom
Had gathered deepest in the Prince's room,
His prostrate body, cold, and turned in part
Upwards—the blade's hilt glittering o'er his heart,
Where his own mad right arm had sent it home!
Beneath him in soft-tinted, fadeless bloom,
Beneath him smiled the portrait he had torn
Madly from off the wall, his wan face borne
Next the clear brightness of that life-like one.
For whose fair sake he lay at last—undone!
But whose glad smile, could *she* have lived that hour,
Had waned and withered inward, like a flower
The storm-wind blights, at stern revenge, like this,
Of love's cold scorn, and passion's unpaid kiss!

Art. X.—*NOTICES OF BOOKS.*

1. The Thoughts of the Emperor M. Aurelius Antoninus. Translated by George Long. Second Edition, revised and corrected. London: Bell & Daldy, York Street, Covent Garden. 1869.

No volume has, indeed, ever been more cordially welcomed by us, than this London edition of the thoughts, or meditations, of the great Roman Emperor, as translated by the great historian of the Roman Republic. Many thanks to Mr. Long for this presentation copy of his work! On its first appearance, we read, with inexpressible pleasure and delight, the first volume of Mr. Long's *Decline of the Roman Republic.* Since then the second, and the third, volumes of this great history have been published, and the fourth is now in course of preparation for the press. But our business, at present, is with the work before us, and not with Mr. Long's history of the Roman Republic.

The *Note*, with which Mr. Long prefaces the translation before us, we shall, without apology, lay entire before our readers. 'I have been informed,' says he, 'that an American publisher has printed the first edition of this translation of M. Antoninus. I do not grudge him his profit, if he has made any. There may be many men and women in the United States who will be glad to read the thoughts of the Roman emperor. If the American politicians, as they are called, would read them also, I should be much pleased, but I do not think the emperor's morality would suit their taste.

'I have also been informed that the American publisher has dedicated this translation to an American. I have no objection to the book being dedicated to an American; but in doing this without my consent the publisher has transgressed the bounds of decency. I have never dedicated a book to any man, and if I dedicated this, I should choose the man whose name seemed to me most worthy to be joined to that of the Roman soldier and philosopher. I might dedicate the book to the successful

general who is now the President of the United States, with the hope that his integrity and justice will restore peace and happiness, so far as he can, to those unhappy States which have suffered so much from war and the unrelenting hostility of wicked men.

'But, as the Roman poet said,

Victrix causa Deis placuit, sed victa Catoni;

and if I dedicated this little book to any man, I would dedicate it to him who led the Confederate armies against the powerful invader, and retired from an unequal contest defeated, but not dishonored; to the noble Virginian soldier, whose talents and virtues place him by the side of the best and wisest man who sat on the throne of the Imperial Caesars.

'GEORGE LONG.'

Mr. Long does not complain, as he well might have done, that his labors had been appropriated by an American publisher, and turned to cash for the exclusive benefit of his own pocket. Every just and thoughtful mind, (and no mind can be just without being thoughtful,) condemns the practice of appropriating, without remuneration, the labors of foreign authors, and desires an international copyright for the protection of such labors against the piracy of publishers. Such an international copyright is, indeed, indispensably necessary to the freedom, the growth, and the glory, of American literature. For what publisher will pay for the manuscript of an unknown American author, when he can get for nothing the printed works of such writers as Macaulay, Thackeray, Dickens, Scott, Thirlwell, Grote, Long, and the whole host of foreign literary celebrities, whether English, French, or German? These absorb the capital of publishers, and build up their magnificent fortunes. In the meanwhile, American literature languishes, and not unfrequently withers down to the very roots, for the want of capital to support and stimulate its energies. If, in spite of fortune, any poor author is so fatally wedded to the pursuit of science and letters, as to work on without counting the cost, his experience is almost sure to prove an exceedingly sad one. He may make books, but he will find that publishers

do not want his wares. They decidedly prefer to deal in imported articles, which have already acquired a reputation on the other side of the Atlantic, and which costs them nothing. It is out of these that they make books, and magazines, for the American market, to the incalculable injury and oppression of our own literature. If, indeed, any poor author, after all his labor, and pains, and expense, is only so fortunate as to find some pampered publisher, who will accept his manuscript as a gracious gift, he may deem himself a happy man. He will then, at least, enjoy the pleasure of seeing himself in print, as well as in poverty. It is an old saying, that 'publishers drink wine out of the skulls of authors;' and this is most emphatically true in every new country which, like our own, enjoys not the protection of an international copyright law. Here publishers, as a general thing, have it all their own way; and frequently realize great fortunes out of the labors of other men's brains.[1] In no other department of human industry, indeed, is labor so fearfully oppressed by capital, as in the scientific and literary productions of genius. An author may, it is true, publish his own book, if he has the money to waste in such a venture; but then publishers alone have it in their power to sell it for him, or to keep it out of the market. Hence, he is completely at their mercy; and he is certainly the most fortunate of men, if, in entering into a bargain with any member of the craft, he is not compelled to part with the lion's share of the profits.

Not satisfied with filching the labors of Mr. Long, his American publisher dedicates them, without his knowledge or consent, to an American writer! This, as Mr. Long justly complains, 'transgresses the bounds of decency.' Ay, he dedicates the labors of George Long to Ralph Waldo Emerson,—the labors of the accurate scholar, the profound thinker, and the great historian, of Brighton, to the ranting rhetorician and rhapsodist of Boston! Alas! how poorly he appreciated the work which he had the capacity to 'convey.'

[1] 'He peeped into a Bookseller's shop,
Quoth he, We are both of one college;
For I sat, myself, *like a Cormorant*, once,
Hard by the Tree of Knowledge.'
Coleridge's *Devil's Thoughts*.

We commend the London edition to our readers. It forms a part of *Bohn's Classical Library*, and is only 3s. 6d. It is indeed one of the most precious volumes of that collection. We shall, in this place, attempt no analysis of the work, we shall give no account of its contents; because we wish every reader to procure the book, and study it for himself. He will be more than repaid for his labor.

About thirty pages of the book are devoted by Mr. Long to the life, and forty more to the philosophy, of M. Antoninus. Both of these sketches are as interesting as they are brief. The thoughts and meditations which follow, are divided into twelve several sections; and furnish a rich repast for every thoughtful or meditative mind. God and duty, good and evil, the constitution of society and of the universe, are the grand themes of the thoughts of the philosophic Emperor.

We shall, in conclusion, notice the last paragraph in the life of M. Antoninus; because it relates to the character of Captain John Smith, which, in the July issue of this Review, we had occasion to defend against the attacks of Mr. Charles Deane, and a writer in *The North American Review*. 'Epictetus and Antoninus have,' says Mr. Long, 'had readers ever since they were first printed. The little book of Antoninus has been the companion of some great men. Machiavelli's Art of War, and Marcus Antoninus were the two books which were used when he was a young man by Captain John Smith, and he could not have found two writers better fitted to form the character of a soldier and a man. Smith is almost unknown and forgotten in England, his native country, but not in America, where he saved the young colony of Virginia. He was great in his heroic mind and his deeds in arms, but greater still in the nobleness of his character.'

The time was, indeed, when New England delighted to honor the name and memory of Captain John Smith; though he was the virtual founder of the colony of Virginia. The only monument ever erected to his memory was the work of New England hearts and hands; building up then, in the purity of their primitive manhood, what some of their degenerate sons would fain pull down now,—the glory of a great name. But, as yet,

these degenerate sons have spared the monument erected to Captain John Smith; which stands to-day, where it stood two centuries ago, on the Isle of Shoals, commemorating the virtues of the man who, in the language of the historian, 'was great in his heroic mind and his deeds of arms, but greater still in the nobleness of his character.'

2. SPEECHES AND ESSAYS UPON POLITICAL SUBJECTS, from 1860 to 1869. By William D. Northend. Salem: H. P. Ives. 1869.

There is not, after all, so great a difference, as we are prone to imagine, between the peoples of the various sections of our country, or the various portions of the civilized world. The characteristics by which they are marked, and distinguished into a variety of the same species, are indeed real, permanent, and perhaps utterly ineffaceable. But yet, as a general thing, the more closely, the more patiently, and the more impartially, we study the people of our continent, and of Europe, the more will our prepossessions on the one hand, and our prejudices on the other, be modified, and made to approximate to the same level; or in other words, the more we shall see to deplore in those whom we most love and admire, and the more to approve in those whom we most loathe and detest. 'The Master of Wisdom,' indeed, enjoins it upon us, as a precaution against the too hasty decisions of our narrow and prejudiced natures, 'to admire nothing, and to despise nothing.' But, although we are not equal to the practice of this transcendental precept, we are resolved, (cost what it will,) to adopt and follow the maxim of the very sublimest of all heroes and saints—'to prove all things, and to hold fast that which is good.'

In spite, therefore, of the gulf which separates Maryland and Massachusetts, we greet William D. Northend, the author of the above-mentioned *Speeches and Essays*, as a true man and good. His hand was, it is true, against us at the beginning, and during the earlier period, of the war; but, nevertheless, it always followed, with unswerving loyalty, his convictions of truth and right. To say that he was never influenced by the public opinion of the North, or passion, or prejudice, would be to say that he was more than human. But that he was always honest, sincere, and courageous, his life and actions, as well as his

speeches and essays, afford the most abundant and conclusive proof. Hence, although 'the speeches and essays collected in this volume, were delivered or published during the eventful period which has elapsed since the Presidential election of 1860,' as he says in the preface; yet, as he truly adds, 'the opinions expressed were not in accordance with the popular sentiment at the time.' At all times, Mr. Northend maintained himself, more or less erect in the storm of popular passion; and the louder and the fiercer the storm grew, the more erect he became; because he saw more clearly how widely and how fearfully it was departing from the great landmarks of constitutional law, and truth, and justice.

'My purpose was,' says he, 'to vindicate, so far as I was able, the immutable principles upon which the Union as organized by the Constitution was based; and to show the importance of that Union for the welfare and happiness of the different communities which composed it.' The immutable principles upon which the Union was based! Such was the purpose of both sides. The one left the Union, and set up another of the same kind, because it believed that the said 'immutable principles' had, under the old Union, been sacrificed on the altar of Mammon. The other, on the contrary, clung to the old Union, and went to war to protect and preserve said 'immutable principles.' Behold the hallucination of both sides! For, after all, as was shown in a previous number of this Review, the Union was based on 'the great error of the eighteenth century;' the great error, namely, that the wisdom of the people is immutable; or, in other words, that their intelligence and virtue are incorruptible. Vain hope! fatal delusion! This immutable principle, this rock of public opinion, proved to be only the treacherous sands and the shifting winds of popular passion; engulfing, once for all and forever, the proud polity created by the infidel philosophers of 1787. Yet, in spite of all this, in spite of all that was passing right before their eyes, in spite of the awful spectacle of a great republic sinking into hopeless and remediless ruins; the leaders of the South, as blind, if possible, as their adversaries, withdrew from the falling fabric, and set up, right in the face of divine Providence and within the sound of its crashing thunders, another republic

of precisely the same kind! Providence, in its infinite kindness to the South, has said to that infinite sham and lie, that it must come down, and bury itself in the earth. That infinite sham and lie has obeyed the high behest; and now we of the South, in the midst of all our sufferings, and sorrows, and wrongs, enjoy the greatest and most unspeakable of all earthly blessings. Our eyes are open. We see the truth. Our leaders still believe, we are sorry to say, that 'the people are capable of self-government;' that is to say, the people of the South, but not the Yankees. The Yankees, on the other hand, (and we mean no disrespect by the use of that epithet,) believe that 'the people are capable of self-government;' that is to say, the Yankees and the negroes, but not the whites of the South. Our disbelief is far more catholic, comprehensive, and profound. It is not the species Yankee, nor the species Negro, nor the species Cavalier, which has brought the grand experiment of self-government to grief; *it is the genus man.* All are alike, if not equally, incapable of self-government. The Yankee, the Negro, the Cavalier, may lay the flattering unction to his soul, that his race is capable of self-government; but it is all a delusion. Even our own beloved people of the South, we fearlessly assert, are not so much better than all the rest of the world, as to be capable of the enjoyment of such a boon. For, as Rousseau well says, or rather, as all history teaches, Democracy, or the government of the people by themselves, is a good form for 'a nation of gods,' but 'is too perfect for men.' The people of the South are only men, and not gods; and hence, if a scheme of pure self-government is not too perfect for them, they are too imperfect for it.

What do we recommend then? What remedy do we propose for the evils under which we labor and groan? To this question, which has often been urged upon us, we can only reply, that we have nothing to recommend. We are not such fools as to imagine, for one moment, that any thing we can say or suggest, would mitigate the awful ruins around us. We can say, however, that we are exceedingly grateful to those of our Northern friends who, like the author before us, extend to us, in the midst of our sufferings and sorrows, their heartfelt sympathy.

It seems to us, however, that they are also objects of the profoundest commiseration and concern. For, unless we are greatly mistaken, they still walk in a vain show, and in the shadow of death. 'I have the fullest confidence,' says Mr. Northend, 'that the American people will, at no distant day, return to them, (the immutable principles on which the Union was based,) with a love strengthened by experience; and that under the organism of the past, or a more effectual one which shall be suggested by the events of this period, a harmonious co-operation, based upon the reciprocity of interests of the people of the several States, will be revived and made perpetual.' We do not look for the millenium quite so soon; and fear that it will be a long, a very long time, before such hopes shall be realized.

Be this as it may, it is certain, that our author has remained true to his convictions, and preserved intact the glory of his manhood. He sustained the Government in its war of coercion, just as long as he approved the purpose for which, as he believed, the war was carried on, namely, the preservation of the principles of the Constitution and the Union. But when the Government threw off the mask, and avowed the purpose of the emancipation of the blacks, and the subjugation of the whites, of the South; then did he turn against the Government with all the energies of his soul, because he deemed its designs unconstitutional, and wicked, as well as fraught with certain ruin to the liberties of the people. Hence, in his *Speech at Salem*, April, 1864, he says:

'The war on the part of the Government was commenced for the declared purpose of restoring the Union and the Constitution. It was believed that a majority of the people of the South desired the continuance of the Union, but were controlled by an excited and desperate minority who had possessed themselves of the reins of the State Governments, and the object of the people of the North was to suppress armed rebellion, and give to the real majority the supremacy in the seceded States. The result was to be accomplished not by the overthrow, but through the instrumentality of the principles of self-government. The people of the North, uninfluenced by

the terrible passions which the war has since excited, then believed that the Union could and should be restored only through the consent of the majority of the people of the several States. I believe now that the only way the Union can be restored or any Union reconstructed is through the voluntary cooperation of the people of the different sections of the country. There can be no other Union upon republican principles. There may be theoretically a unity extorted and sustained by force, such as now exists and is maintained between Russia and Poland, and between Austria and Hungary—a despotic power and a people acquiescing only through military coercion which it is powerless to resist—such a unity will dissolve the moment the armed hand is removed, a unity which, if it could be compelled in this country, would be scarcely less oppressive to the conquering than to the conquered section. It is true in our own experience, that an attempt to subjugate one portion of the people is, and can only be, prosecuted by the exercise of despotic power. The constitutional liberties of the people are now suspended, their rights under the laws denied, and the principles of self-government subordinated to the will of the Federal Executive. The President claims that it is necessary for him to assume these powers in the prosecution of the war, and that he is authorized to exercise them from military necessity. If this claim is a correct one the despotic and anti-republican character of the acts is not changed. No one will deny that if the present exigencies demand and justify such exercise of power, the same necessity will require a continuance of their use so long as the exigencies continue; and that if these exigencies shall be perpetual in duration, then that we must have a perpetual despotism, strengthening and increasing as all power does in its exercise.'

Again, he says: 'There can be no union of the people of the different sections of the country with our republican institutions preserved, without it is based ultimately upon the free exercise of the right of self-government in the people of the several States. The declared policy of the Administration is now subjugation. It has announced its determination to prosecute the war, not for the purpose of effecting a result which will permit the peo-

ple of the South to exercise the rights of self-government, but for the purpose of compelling the adoption of such constitutions and laws in the several States of that section as the dominant party of the other section of the country, or its representatives, shall prescribe. These results, the experience of the world and human reason teach, can be accomplished only through a thorough subjugation and keeping in subjection, or in the extermination, of the people of the South. The principles of self-government are refused the people of the Southern States, and in their place is attempted to be substituted a power in one-tenth who have subscribed to the oath under the so-called amnesty proclamation, to rule over the other nine-tenths, and that oath taken in most instances through the influence of military power, for without this influence there is not a State in the South in which one-tenth of the people can be found to acquiesce in the policy and requirements of the Federal Executive.'

Such are a few specimens of the eloquence of this strong man, this sound thinker, and this fearless patriot. He has, of course, been denounced at the North as disloyal; because he was not afraid to say that his soul was his own, or to stand up for the constitutional liberties of his country. We honor him more than words can express.

We are sorry, indeed, that we have felt called upon to express doubts respecting the speedy return of 'the American people' to the principles of the Constitution and Union of 1787, or to cast a cloud of suspicion over his roseate views of the future. We shall, of course, be deemed dismal croakers, who, having nothing to recommend, can only forbode and predict evil. We have, it is true, nothing to recommend with a view to cure the incurable disorders of the Republic, or to put the wheels of the universe back into their former channels. But still we are not without hope; and, after all, we really have something to recommend to all our friends of the South.

It is as follows: Be thankful, that your eyes are open, and that you now see the truth. Be thankful, that you see, at last, the real nature of self-government by the people, and know it by its fruits, which you have tasted. Rejoice that your once

blind faith in that most monstrous of all monstrous tyrants, 'the numerical majority,' is no more. Cease to curse the Yankees, and reserve your wrath for that monstrous tyrant, under whose dominion they found themselves, and to whom many of their most atrocious deeds may be fairly imputed. Thank God that it has been, and is, your sublime privilege to suffer wrong with the weak, rather than to enjoy the vulgar triumph of wickedness with the strong. Put not your trust in princes, nor in peoples, nor in politicians. Wait on Providence, and watch every opening to improve, by all lawful and legitimate means, your condition in life. Mind your own business, and let other people's alone. Hoe corn and dig potatoes. Plant cotton, corn, wheat, rice, tobacco, and devoutly pray for abundant crops. Above all, *be men*. Eat no dirt, spit no fire, and subscribe for the *Southern Review*.

3. Dame Nature and her Three Daughters: *A Grandpapa's Talks and Stories about Natural History, and Things of Daily Use.* Translated from the French of X. B. Saintine, author of 'Picciola.' New York: Hurd & Houghton. 1869.

A delightful little book this for children, filled with information respecting the mineral, the vegetable, and the animal kingdoms, and adorned with suitable illustrations. The garb of allegory, for which the author is famous, and in which the whole is presented, cannot fail to prove attractive to the minds of the young. Indeed, if the object be to furnish good, wholesome, and nourishing food for the mind and imagination of children, this little book is precisely the one which should be placed in their hands. Messrs. Hurd & Houghton have, by the publication of this volume, rendered good service to the all-important cause of the education of the young. Possessing, as it does, all the charms of fiction, it introduces Nature to them in such a way as to render her the handmaid of morality and religion; producing, at the same time, a sound and healthy development of the faculties of their precious and immortal minds. We shall certainly place the book in the hands of our grandchildren.

4. Letter to Ex-President Andrew Johnson. By G. B. Lamar, Sen.

This letter, which sets forth a simple narrative of facts, is one of the most crushing documents ever published. On re-

tiring from office, Mr. Johnson, either with the most unblushing effrontery, or the most profound self-ignorance, made the demand: 'Whom have *I* defrauded? Whom have *I* oppressed? Of whose hand have I received any bribe to blind my eyes therewith?' Mr. Lamar accepts the challenge, put forth with such apparent confidence, and, in a simple narrative of facts, reveals an amount of fraud, and oppression, and meanness, and cruelty, and deceit, and lying, and rapacity, on the part of the high officials under the Administration of Mr. Johnson, and all perpetrated with his knowledge and connivance, which sickens the heart of any decent man to contemplate. In the face of such facts—and Mr. Lamar's case is only one out of a thousand—it is simply ridiculous, it is unutterably disgusting, for Mr. Johnson to prate about the Constitution, or justice, or human rights. It is all talk—as hollow, hypocritical talk as ever issued from the lips of man. Though, as President of the United States, he had the power to redress many of the evils around him, and though, by his oath of office, he was bound to use his power for that purpose; he, nevertheless, permitted them to rage and riot in the lives, and liberties, and fortunes of the innocent, without the least effort to rectify them. Even when he saw and acknowledged the existence of such evils, and solemnly promised to redress them, he utterly failed to do so. He saw widows and orphans robbed; he saw rich men reduced to beggary, and that, too, in direct violation of the plighted faith of the Government, as well as of the very officials by whom the outrages were perpetrated; he saw innocent men put to death with impunity, or sent to prison for years on notoriously false testimony; he saw all this—and a great deal more—without even an attempt to redress such horrible wrongs; though a dash of his pen might have prevented them. The murder of Mrs. Surratt is, indeed, only one of a million of crimes, or base and dastardly compliances, which will stamp his name and memory with everlasting infamy. If one spark of truth, or justice, or courage, could have been kindled in his cowardly soul, or made to live in his dead heart; there were, most assuredly, occasions on which he must have *acted* like a President, as well as *talked* like a patriot. As it was,

however, though he could talk like a man, no spectacle of rapacity, nor cruelty, nor meanness, nor perfidy, nor murder, could rouse his soul to show, by action, that he was even the ninth part of the ninth part of a man. The pamphlet before us,—and a thousand such might be written with perfect truth,—is sufficient to justify, nay, to necessitate, all that we have uttered in this brief note. Indeed, we should loathe and abhor ourselves as dead dogs, if we could contemplate such baseness, such multiplied and outrageous wrongs, without feeling our blood to boil with indignation, and our whole soul to labor for language in which to express our sense of such unutterable perfidy in a President of the United States..

5. Historical Sketch of the Chatham Artillery during the Confederate Struggle for Independence. By Charles C. Jones, Jr., late Lieut. Colonel of Artillery, C. S. A. Albany, New York: Joel Munsell. 1867. Pp. 240.

The author of the above work, is one of the heroes of the late war, whose character it is a perfect pleasure to contemplate and dwell upon. In his erect form and gentle bearing, we see but the outward signs of the knightly courage and courtesy by which his whole life and conduct, both as a man and a soldier, have been characterized and distinguished. Always as humane as he was brave in war, he is, in peace, as free from all bitterness and malice as he is firm and decided in the maintenance of his principles, or convictions of right. Amid the darkest trials of the war, as well as the still darker trials of peace, his spirit has ever been as erect as a sunbeam, and as beneficent in its action; scorning alike the coarse brutalities of the one, and the base servilities of the other. He is, indeed, one of the knights of the old school,—*sans peur*, *sans reproche*,—or rather, let us say, one of those knights of the young South, whose characters will, in the end, be an object of delight to all sections, to all parties, and to all ages. The fall of the Confederacy, though a tremendous and crushing blow to all his hopes, did not prostrate him long; and, accordingly, we soon find him confronting the fortunes of peace, with as brave and bright a brow as he had faced the fortunes of war. We need scarcely add, then, that we rejoice in his present success more than words can express.

After the fall of the Confederacy, he moved to the city of New York, and there determined to fight out the battle of life as an Attorney and Counsellor at Law. Associated with General Ward, in the practice of his profession, he wins golden opinions from all who call at his office, and greenbacks from not a few. Though devoted to his profession, he has found time to write the work before us; and is, at odd moments usually wasted by other men, engaged in preparing for the press a new and enlarged edition of his *Monumental Remains of Georgia;* a small volume which made its first appearance in 1861. The historical sketch before us, embraces more, of course, than a mere account of 'The Chatham Artillery.' It includes many scenes and events of the late war, which are more or less closely connected with the main purpose of the author. His book is dedicated to his 'Brother members of the Chatham Artillery;' to whom, in the opening paragraph of the preface, he pays the following tribute:

'The preparation of the following sketch has been a labor of love. The attachment which the writer entertains for his old company—the Chatham Artillery—an organization whose birth was well nigh coeval with the termination of the Revolution of 1776—whose manhood has been demonstrated for eighty years—whose patriotism has never been questioned—whose liberality and high-toned friendship have been ever warmly acknowledged—whose readiness and ability to respond with alacrity, intelligence, fidelity, and efficiency to every duty devolving upon them, whether amid the sunshine of peace, or the shadows of war, have always been freely admitted—whose record is untarnished, and whose every memory is pleasant, generous and heroic—is peculiar in its character, firm, and abiding; and if this brief outline of the services rendered by the Battery during the memorable Confederate struggle for independence be kindly received by my brother members, and serve to perpetuate the lively remembrance of those days of privations, exertion, and dangers, cheerfully devoted to the maintenance of a cause, than which none holier ever nerved the arm of a soldier or inspired the breast of a patriot, the object of this narrative will have been entirely accomplished.'

6. Card Etiquette. By J. N. Gimbrede, Card Engraver, Stationer and Importer of Fancy Goods, 588 Broadway, (Metropolitan Hotel,) and 872 Broadway.

This little, this tiny volume, recalls many pleasant, as well as many sad, reminiscences to our minds; for the father of its author was our teacher of drawing in the United States Military Academy at West Point. The author himself is, and has long been, well known to the polite world, for his exquisite taste and skill as an engraver; accomplishments which are, at present, as manifest as ever in all the appointments and workmanship of the large establishment over which he now presides. This little book contains the whole code of card etiquette, as well as the finest specimens of all the different kinds of cards,—business cards, visiting cards, wedding cards, menu cards, cards of announcements, cards for balls, cards in memoriam,—in short, all sorts and descriptions of cards, except inelegant ones.

The monograms, designed and engraved at the establishment of Mr. Gimbrede, are particularly beautiful. Indeed, every lady, or gentleman, who is at all choice in the appointments of the escritoire, and has the means to indulge so elegant a taste, should invoke the assistance of Mr. J. N. Gimbrede; a safe guide to all who would shun errors of taste, breaches of card etiquette, and, above all, the awful ban of the reigning fashion!

7. Southland Writers. *Biographical and Critical Sketches of the Living Female Writers of the South, with Extracts from their Writings.* In two volumes: pp. 973. Philadelphia: Claxton, Remsen & Haffelfinger. 1870.

More attractive volumes than the above, it has seldom, if ever, been our pleasure to notice. Every thing about them is attractive and pleasant to the eye,—the paper, the binding, and the letter-press. We are sorry, indeed, that these beautiful volumes came too late for an extended notice in this number of our Review; for, if we are not greatly mistaken, we have, at last, in their pages, a fit tribute to the female genius of the South. Long have our noble female writers deserved such a tribute; and it shall be no fault of ours, if the occasion be not improved to render to them all the honor that is so justly their due. We shall, in our next issue, furnish an elab-

orate paper on the work before us; and, in subsequent numbers, we hope to devote a series of articles to the principal female writers of the South—one article at least to each writer. No better service could, in our opinion, be rendered by us to the great cause of Southern literature.

8.—The Nine Muses; or American Beauty Personified.

We have borne many wrongs and insults from our Northern neighbors; long and patiently have we borne them; but really this little book is too much,—it is more than we can stand. What! 'American beauty personified as the nine muses;' and yet, in the whole immortal nine, not one Southern form or face! What son of the South can bear this? If there be one, only show us the man,—the man!—and we will show you a craven cur, fit only to crawl under the footstool of power, and lick the foot that kicks it into submission. As for ourselves, we are now for war. All our former wrongs were nothing to this. We did not vote for Secession; we voted for Bell and Everett; we coveted peace, and we ensued it then. But now we go for war. Did not Helen's beauty fire all Greece, and kindle 'Achilles' wrath,' that 'ten thousand woes caused to Achaia's host, and sent many a soul illustrious to Hades premature?' But what was Helen's beauty to the beauty of the South? Shall we not, then, O ye valorous sons of the South! resent this outrageous insult to the majestic sweetness, and the peerless charms, of our glorious women? Our stand is taken; we do not go for secession now; we go for revolution this time; we go for war, pestilence, and famine. What! O ye merciful powers! all American beauty—all—all—all—done up in 'the Nine Muses;' and yet not one hint that there is any beauty in the South, or any South in America! We cry aloud for war.

We submitted to *The National Reader*, which contained nothing but extracts from Northern literature, and accounts of Northern achievements. Nay, when Southern truths were denounced as sectional, and Northern lies lauded as national, we contrived to put up with the bitter imputation of our enemies; the more willingly, perhaps, as we have ourselves sometimes entertained the suspicion that truth is sectional, and that lying is what

some people call *national*. We have submitted, tamely submitted, to the insulting claim, that all Northern interests, and ideas, and schemes are national, while those of the South are sectional, and consequently unworthy the fostering care of the *national* Legislature. We have submitted to all this, we say, and more; but there is a limit to all things. There is a point at which submission ceases to be possible, and rebellion itself becomes a duty. We have reached that point. The cup of our wrongs is now full to overflowing, and sparkles with irrepressible rage. The claim that all American beauty is Northern, has done the business. Why, in the little corner of a single Southern eye, we have seen more beauty, than the Northern artist has embodied in 'the Nine Muses.'

We are perfectly disinterested in this opinion; for we have no pretensions whatever to any sort of personal pulchritude. On the contrary, we have always secretly deplored, though we have not always openly acknowledged, our most disagreeable and detested ugliness. We are not without some little consolation however. Ordinary mortals are gratified when they can discover any resemblance between themselves and really great men; and it is our consolation,—our sweet and soothing self-satisfaction,—that we are like Socrates, who was the ugliest man in all Greece, and, at the same time, the most passionate admirer of beauty. The less beauty we have, then, the more we admire the beauty of others, and find in this admiration, in this passion, a pure, disinterested, all-absorbing, and perfect pleasure. How feebly has the poet said: 'A thing of beauty is a joy forever.' It is a life, a light, and a joy, all in one; it is a gleam of heaven upon earth,—an exquisite, inexpressible, sublime satisfaction, which entrances the soul, and wraps it in sweet oblivion and forgetfulness of the ugliness of its own poor tenement of clay. Hence the unconquerable rage with which we resent the insult offered to the beauty of the South.

We are like Socrates in another respect; for, in spite of the great provocation we labor under, we have an eye for truth and justice, as well as for beauty. Hence, after all, we can see, and acknowledge too, the very great beauty of 'the Nine Muses' of the North. We hope they will visit our city; so that all

our fair women, and all our ugly men, may have the pleasure of seeing them. It would be no ordinary treat. They are, indeed, only less beautiful than the beauties of the South. They eclipse all the rest of the universe. The artist has done well—wonderfully well; and he would, no doubt, have done still better, if he had only lived in our brighter clime, and studied our more beautiful models. Be this as it may, (for Socrates is speaking justly now,) it is certain that American beauty is national in this sense, that it may be found in the fairy South as well as in the frozen North. Boston—the 'hub' and the Helicon—may have as much brains, it certainly has not as much beauty, as Baltimore.

9. PRIMARY ARITHMETIC. By P. A. Towne, formerly General Principal of the Barton Academy, Mobile, Alabama. Louisville, Ky.: John P. Morton & Co. 1867.

INTERMEDIATE ARITHMETIC. Same Author and Publisher.

ARITHMETIC, Adapted to the Course of Instruction usually pursued in the Academies and Common Schools of the United States. Same Author and Publisher.

We noticed, a year ago, several Series of Arithmetics,—Davies', Ray's, Venable's, Felter's, Robinson's—and found some good things in all of them. We cannot only say as much of the present series, but can honestly add that even the cursory examination we have been able to give it, has disclosed some new features that strike us favorably, and justify us in strongly recommending those in search of an arithmetic, to procure the series and examine it for themselves. The publishers have, as usual, done their part worthily: the paper is good, and the type excellent.

10. A PRACTICAL GRAMMAR OF THE ENGLISH LANGUAGE. By Noble Butler, A.M. Louisville, Ky.: John P. Morton & Co.

We do not expect ever to see an English grammar that *satisfies* us, unless we write one ourselves, which we have no intention of doing. Mr. Butler's comes nearer to the mark than any that we can now recall, except, perhaps, Goold Brown's. We particularly like what he says on the comparison of adjectives. When, however, speaking of the neologism, 'the question *is being* discussed,' he says, 'This mode of expression *is not improper in the nature of things*, but it is too modern to

be yet considered a principle of the language,' we cannot refrain from entering our most earnest and emphatic dissent. We hold most undoubtingly, and may sometime undertake to show, that it is eating into the vitals of the language and eating out the very heart of the substantive verb. 'To *be*, or not to be! That is the question.'

11. The Haber-meister: *A Tale of the Bavarian Mountains.* Translated from the German of Herman Schmidt. New York: Leypoldt & Holt. 1869. For sale by Kelly, Piet, & Co.

There is something strangely absurd in the passion of the day for translations of German novels. When we recollect that novel-literature belongs as peculiarly to the English as Old Comedy to the Greeks, or Satire to the Romans; that other moderns have imitated boldly and badly, and the Germans most unsuccessfully of all; it is impossible to repress a smile at the eager interest evinced everywhere in Mühlbach, Auerbach, and the rest. The Germans, themselves, have not been so carried away with their novelists. Translations of Scott, Dickens, and Bulwer, form the staple of novel-reading among high and low in Germany. Almost the only writer among them who has found, or deserved to find, favor for his novels, is Gustav Freitag, and he has produced only two books. The fact is, French and Germans are as incapable of producing a novel-literature as Greeks and Romans were; and for the same reason. They know little more than the ancients of Love as the grand passion; where marriage is arranged by the parents, made for money, or for the amount of house-linen the wife can bring as a dowry, it is no wonder that the English novel finds no counterpart. Modern German love cannot make a novel, and when they make their heroes love in the English style, the incongruity between their manners and their emotions, is supremely ridiculous.

There is a certain charm, it is true, in the naïveté of these German novelists so-called. After you have followed Dickens or Thackeray through the most intricate mazes of humor, motive and action; have seen a real human heart turned wrong-side out, and watched every quivering of its nerves under the experiment of all possible circumstances; there is

a sense of relief in the change when you take up a German story, in which only a few of the simpler chords of human life are struck; in which you find an easy plot, instead of the intricate complication of the modern English novel; and in which, if it is well done, a sweet and natural description of nature acts as a mild narcotic, enabling you to find in yourself the romance which is not supplied by the book.

The Haber-meister is one of the most indifferent of German novels indifferently translated. The theme is one of which Scott would have made a splendid romance, or Bulwer a brilliant novel. Schmidt has made a poor story of it. The plot is bold without being simple; the characters utterly untrue to human nature; the pictures of peasant life, so confused and indistinct as to be worth nothing. Whether the absurdity of the following sentence is due to the author or the translator, we know not: 'Before the store, in the old brown-black leathern chair, sat the old lady, the mistress of the house, a gaunt, tall figure, with features earnest, but not unfriendly, *whose expression was brightened* by her silver white hair, and the *fixed look of her eyes*, now *dim with age*.' P. 136.

Another passage reads thus: 'She always had both of these at hand in order to impart to her solitary retirement a little earthly variety, and to alternate work with prayer, and *join the last thread of human activity*, which she still held below, to *the rays of eternity already* dawning upon her.' P. 137.

12. The Fisher Maiden. By Bjornstjerne Bjornson. Translated by M. E. Niles. New York: Leypoldt & Holt. 1869.

This is the second story of Bjornson's, which has been recently translated into English. *Arne*, the previous one, had a most enthusiastic reception, and is still esteemed the better of the two. There is about both of them a charm of simplicity and play of humor, which make their execution almost faultless. The Fisher Maiden is a work with a purpose. Its author wishes to reconcile his countrymen, the Norwegians, to the theatre; to show that theatre-going is one of the legitimate pleasures, and that the life of an actor or actress is not necessarily a sinful one, but may be one of great usefulness. The

heroine of the story, Petra, or the Fisher Maiden, has a mystery in her character from childhood. Indeed, the author is careful to put the proper amount of oddness into her ancestry for two generations back, so that no one can dispute her right to be peculiar. The mystery is solved when Petra has an opportunity to witness a theatrical performance. To be an actress becomes the great predominating passion of her soul. This is the career for which she is, by the constitution of her nature, destined. She had had her love affairs, but the 'grand passion' is now subordinate to another—the love of art. She weds the dramatic art. Her lover, too, with far more observation than that class are generally presumed to have, sees the propriety of her decision. He recovers from his 'despair' and gets other 'filling' for his 'aching void' with a celerity sometimes witnessed in real life, but seldom seen in a novel.

One incident in the story is worth mentioning. Petra, from 'excess of tenderness,' at one stage of her existence, finds herself engaged to be married to three men at the same time. So far there is nothing very remarkable. But never were such consequences known to follow the practice of coquetry as in her case. Her lovers begin to fight among themselves, and the people of the whilome peaceful village are thereby split up into feuds. This all ends in a grand alliance to drive Petra from the town, and formidable mobs beset her mother's house until she is forced to leave the village 'between two days.' In all the imaginable situations of a novel, we had never dreamed of such rough treatment for coquetry.

BOOKS RECEIVED.

A Compendious German Grammar. By William D. Whitney, Professor of Sanscrit, and Instructor in Modern Languages in Yale College. New York: Leypoldt & Holt; F. W. Christern. Boston: S. R. Urbino. 1869.

The Patriot's History of Ireland. By M. F. Cusack, Author of *The Illustrated History of Ireland.* Ireland: National Publication Office, Kenmare, Co. Kerry. America: L. Kehoe, Catholic Publication House, 126 Nassau Street, New York. 1869.

The Medical and Surgical Lessons of the late War. The Introductory Address delivered before the Medical Class of the Kentucky School of Medicine, Louisville, Ky., October 5, 1868. By E. S. Gaillard, Md., Professor of General Pathology and Pathological Anatomy. Louisville, Ky.: Louisville Journal Job Print. 1868.

Address Spoken before the Phi Kappa and Demosthenian Societies of the University of Georgia, on Commencement Day, August 2, 1869, On the Dead of Georgia. By Col. R. M. Johnston; an Honorary Member of the Phi Kappa Society.

Address of Patrick Henry Aylett before the German Societies at the Centennial Anniversary of Fred'k Alex. Humboldt, Richmond Theatre, September 14, 1869. Richmond: 'Enquirer' Steam Presses. 1869.

The Two Baronesses. A Romance. By Hans Christian Andersen, Author of *The Improvisatore*, &c. New York: Hurd & Houghton. Cambridge: Riverside Press. 1869. For sale by M. H. Waite, Baltimore.

A Wreath of Rhymes. By Millie Mayfield. Philadelphia: J. B. Lippincott & Co. 1869. (Baltimore: H. Taylor & Co.)

Memoirs of the War in the Southern Department of the United States. By Henry Lee, Lieutenant-Colonel, Commandant of the Partisan Legion during the American War. A new Edition, with Revisions, and a Biography of the Author. By Robert E. Lee. New York: University Publishing Company. 1869. (Baltimore, H. C. Turnbull, Jr.)

The Primeval World of Hebrew Tradition. By Frederick Henry Hedge. Boston: Roberts Brothers. 1870. For Sale by James S. Waters & Son.

Through Night to Light. A Novel. By Friederich Spielhagen. From the German, By Professor Schele De Vere. Author's Edition. '*Ex Fumo dare Lucem cogitat.*' Horace. New York: Leypoldt & Holt. 1870. For Sale by James S. Waters & Son.

The Writings of Madame Swetchine. Edited by Count De Falloux, of the French Academy. Translated by H. W. Preston. Boston: Roberts Brothers. 1869.

A Southern School History of the United States of America, from the earliest Discoveries to the present time. By W. N. McDonald, A. M., Superintendent of the Male High School of Louisville, Ky., and J. S. Blackburn, Principal of 'Alexandria High School,' Virginia. Baltimore: Geo. Lycett. 1869.

A Charge to the Clergy and Laity of the Diocese of Louisiana. By the Right Rev. J. P. B. Wilmer, D. D. New Orleans. 1869.

THE SOUTHERN REVIEW.

THE SOUTHERN REVIEW is published on the first day of January, April, July, and October, at Five Dollars per annum, payable in advance, or on delivery of the first number. If not paid within three months, the price will be Six Dollars. In order to secure punctuality, this rule will hereafter be strictly enforced. Single Numbers, One Dollar and Fifty Cents.

By a recent decision of the P. O. Department, the postage on THE SOUTHERN REVIEW *to subscribers receiving from the office of publication, has been fixed at* FOUR CENTS PER COPY.

Communications should be addressed to the REV. E. J. STEARNS, *Associate Editor, SOUTHERN REVIEW, Baltimore, Md.; and all checks and money-orders should be made payable to his order.*

The Editors are happy to receive and to consider Articles from any quarter; but they cannot hold interviews or correspondence respecting them.

Contributions should not exceed thirty printed pages; and must be prepaid at letter rates. If not accepted, they will be returned to the owners, at their request and expense.

All back numbers of THE SOUTHERN REVIEW, *except the numbers for April,* 1867, *July,* 1867, *and October,* 1867, *can be had on application to the publisher.*

ALBERT TAYLOR BLEDSOE, LL. D., *Editor.*
REV. E. J. STEARNS, A. M., *Associate Editor.*
OFFICE: SUN BUILDING, BALTIMORE, MD.

AGENTS.

E. CUMMISKEY, PHILADELPHIA.	J. E. NASH, NEWBERN, N. C.
S. W. BOOK AND PUBLISHING CO., ST. LOUIS.	PUTNAM & MANLY, MOBILE.
H. C. CLARK, VICKSBURG.	A. EYRICH, NEW ORLEANS.
G. T. GETTY, & CO., GEORGETOWN.	F. W. CHRISTERN, 863 B'DWAY, N. Y.
VICTOR & AMBLER, LYNCHBURG.	W. SCOTT GLORE, LOUISVILLE.
WILSON & WALKE, NORFOLK.	MARSHALL WINN, SAN FRANCISCO.
DONALDSON & CO., NATCHEZ.	J. SHILLINGTON, WASHINGTON D. C.
KENNEDY & COCKRELL, NATCHEZ.	GEO. E. FRENCH, ALEXANDRIA, VA.
	WOODHOUSE & PARHAM, RICH'D, "

WM. KNABE & CO.

MANUFACTURERS OF

GRAND, SQUARE AND UPRIGHT

PIANO FORTES,

WAREROOMS,

No. 350 West Baltimore Street, near Eutaw,

BALTIMORE, MD.

Fifty Gold and Silver Medals Awarded—The Highest Awards in Competition with the Best Manufacturers in the Country.

☞THESE INSTRUMENTS have been before the public for nearly Thirty Years, and upon their excellence alone attained an UNPURCHASED PRE-EMINENCE, which pronounces them unequalled. Their

Tone Combines great power, evenness and fine singing quality, as well as great purity of intonation, and sweetness throughout the entire scale. Their

Touch Is pliant and elastic, and entirely free from the stiffness found in so many Pianos. In

Workmanship They are unexcelled, using none but the very best seasoned *material*, the large capital employed in our business enabling us to keep continually an immense stock of lumber, &c., on hand.

☞All our SQUARE PIANOS have our New Improved Overstrung Scale and the AGRAFFE TREBLE.

We would call special attention to our late improvements in GRAND PIANOS and SQUARE GRANDS, patented August 14, 1866, which bring the Piano nearer perfection than has yet been attained.

Every Piano fully Warranted for Five Years.

Constantly on hand a large assortment of CHURCH AND PARLOR ORGANS of the most celebrated makers.

WM. KNABE & CO.

No. 350 W. Baltimore Street, near Eutaw, Baltimore.

JOHN COX, PRINTER, BALTIMORE.